

Naturally, any study of music must begin with an understanding of those simple elements which go to make up music. The first of these elements to be discussed is Pitch, which is designated by the location of a note on a musical staff. This is probably best explained by the accompanying illustration which shows the location of each note in the "treble" and "bass" clefs.



Ex. 1

Some definitions relating to pitch:

SEMI-TONE . . . The smallest distance between two notes.

WHOLE-TONE . . The equivalent of two semi-tones.

INTERVAL The distance between two different pitches.

DEGREE Each note in a scale is called a degree of scale.

TETRACHORD . . A four-note scale consisting of the following intervals:

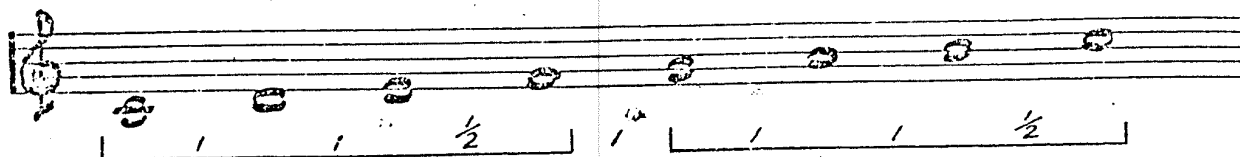
Whole-tone, whole tone, semi-tone

The first direct application we will make of pitch is to the construction of major scales. A scale may best be defined as a series of related notes moving in a constantly ascending or descending direction.

LESSON I.

A. MAJOR SCALE CONSTRUCTION

The major scale is made up of seven different notes, one on each successive line and space of the staff and each having a different letter name. The eighth note, or octave, is added since this note gives a feeling of resolution and completion when the scale is played.

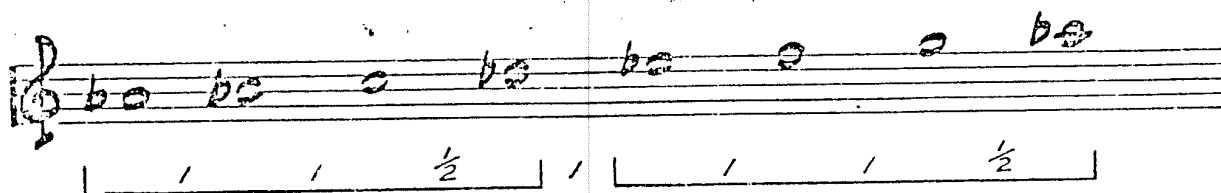


Ex. 2

Upon analyzing the intervals of the major scale built on C, you will find that the structure of the major scale is as follows: (two tetrachords connected by a whole tone)

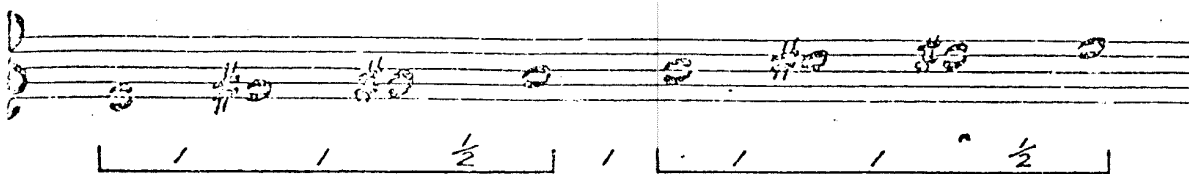
Whole tone, whole tone, semi-tone. (Tetrachord)
Whole tone.
Whole tone, whole tone, semi-tone. (Tetrachord)

These intervals between the degrees of the major scale never vary, hence, major scales may be built on any note using the structure of the scale built on C as a guide. A major scale built on the root tone Ab would have the following appearance:



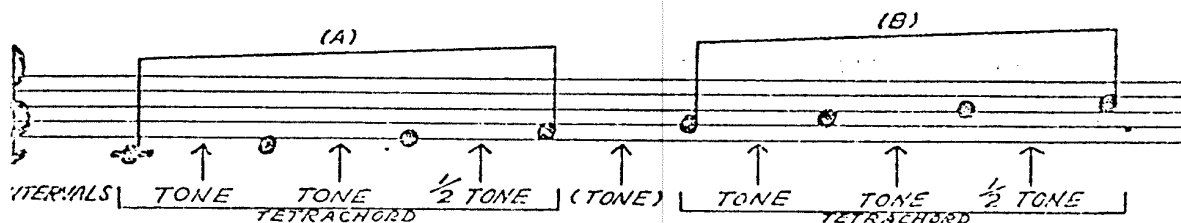
Ex. 3

Note that the fourth degree of this scale must be called Db rather than C#, since the third degree had the letter name C, and the definition of a major scale stipulates that each of the scale degrees must fall on the next successive line or space and receive the next successive letter name. Just to be certain that the foregoing is perfectly clear, here is one more example of a major scale, this time built on the note E.



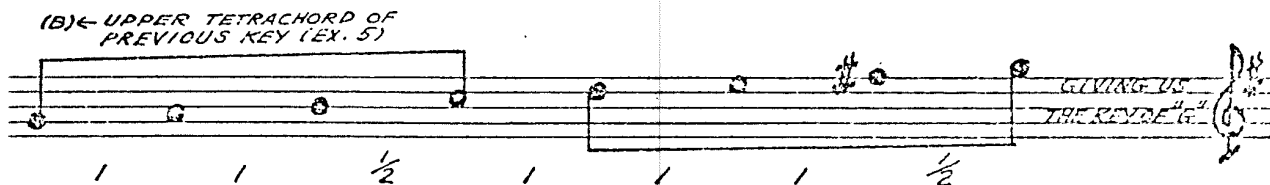
Ex. 4

Although major scales may be constructed as described above, a more organized method for finding all of the major scales and key signatures is based on the application of the tetrachord. As may be seen in the following example, the major scale is divisible into two equal parts, each part forming a tetrachord. These tetrachords are identical in construction and are connected by the interval of a whole tone.



Ex. 5

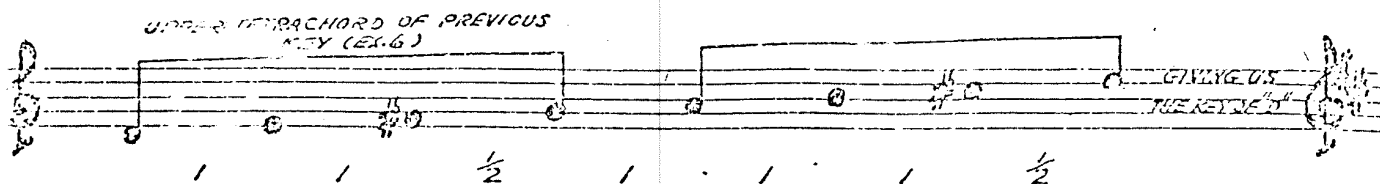
By using the upper tetrachord as the lower tetrachord in our new scale, it is possible to arrive at all of the key signatures containing sharps.



Ex. 6

In the previous example it is evident that the F must be sharpened, since each tetrachord must be composed of whole tone, whole tone, half tone.

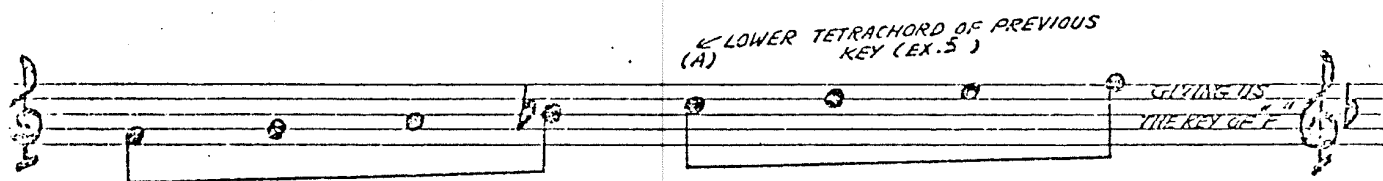
By following the same procedure it is obvious that the next sharp key would begin with the tetrachord built on the note D, i.e., the upper tetrachord of the G scale.



Ex. 7

Again, notice that the note C must be sharpened in order to conform to the whole tone, whole tone, half tone structure of the tetrachord.

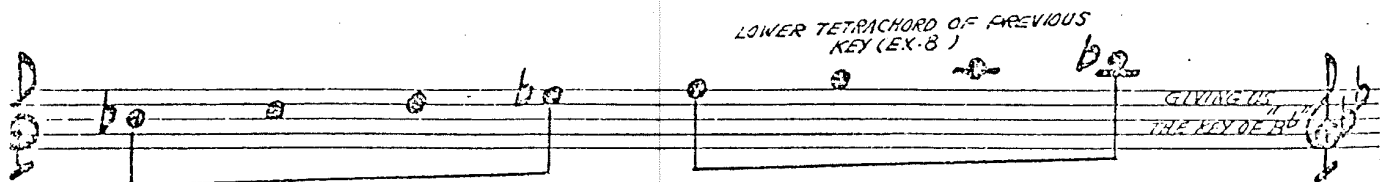
Beginning again with our C scale and this time using the lower tetrachord as the upper tetrachord of our new scale, it is possible to arrive at all of the key signatures containing flats.



Ex. 8

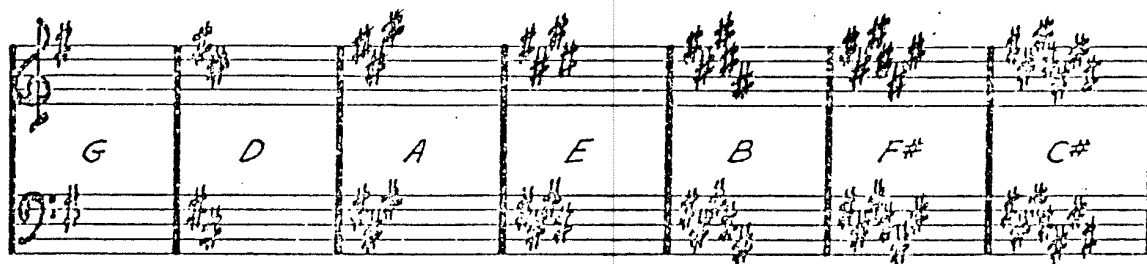
Notice that in this case the B was flatted in order to conform to the tetrachord structure.

Once again by using the lower tetrachord as the upper tetrachord of the new scale, it is evident that the next flat scale would have an upper tetrachord built on the note F and a new lower tetrachord constructed below it.



Ex. 9

The following tables show the signatures of all of the sharp and flat keys in treble and bass clefs.

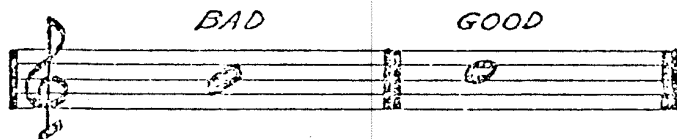


Ex. 10

B. NOTATION

There are certain basic principles to be followed in the correct and legible notation of music. Here are a few of them to help you in your work.

1. Make sure that every note is clearly centered on a line or a space.



Ex. 11

2. The same applies to the use of sharps and flats. If you are sharpening the note F, be sure that the

sharp is centered directly before the note.



Ex. 12

3. If a note has a stem attached to it, make sure that the stems are straight and try to observe the following rule: If the note is above the third line stems go down; below the third line stems go up.



Ex. 13

4. Always strive for neat manuscript. It may take a little longer to complete the work at the start, but as you progress you will develop speed together with a clear, legible manuscript.

(At this point it would be advisable to complete Problems No. 1 through 6 of the assignment)

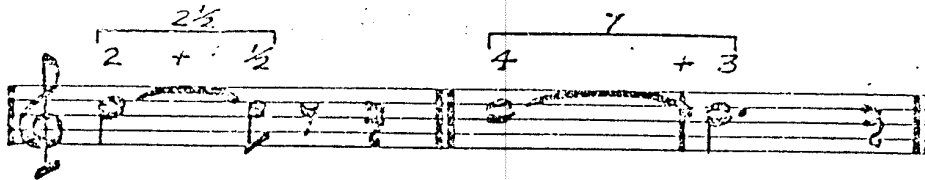
C. RHYTHM (Part I)

Rhythm may be defined as the factor which controls duration (i.e., how long each note is to be held). Following is a table showing each of the rhythmic values which will be used in succeeding lessons and the duration of time each occupies. The corresponding rests which are shown on the right represent the exact opposite, i.e., the absence of sound for a specified period of time.

Name	Duration (When quarter note gets one beat)	Equivalent rest
	whole note	4 beats
	half note	2 beats
	quarter note	1 beat
	eighth note	1/2 beat
	sixteenth note	1/4 beat
	half note triplet	4 beats
	quarter note triplet	2 beats
	eighth note triplet	1 beat
	sixteenth note triplet	1/2 beat
	dotted half note	3 beats
	dotted quarter note	1 1/2 beats

Ex. 14

If the duration desired cannot be represented by any single note, it is achieved by combining two notes with a "tie". This means that the second note is not considered to be a new attack but is simply joined with the first as one duration.



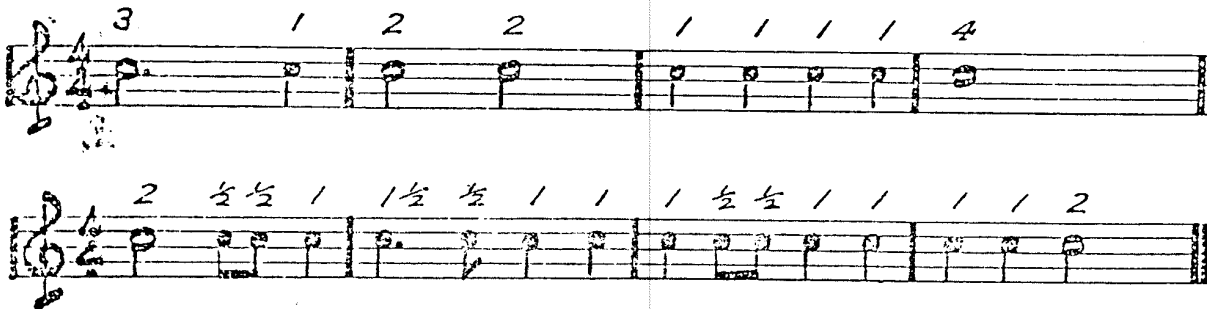
Ex. 15

The controlling factor in rhythm is the time signature. In each case the top number represents the number of beats or "counts" in a bar of music, while the bottom number tells us the kind of note that gets one beat.

4/4	6/8	2/2
4 beats per bar	6 beats per bar	2 beats per bar
quarter note gets 1 beat	eighth note gets 1 beat	half note gets 1 beat

Ex. 16

Assuming that a bar of 4/4 time can be written as four quarter notes, it is obvious that any combination of durations which add up to four will also form a bar of music in 4/4 time. Following are several examples of measures in 4/4. Notice that each bar must contain some combination of durations that total four beats.



Ex. 17

Next, some examples in three-four time:



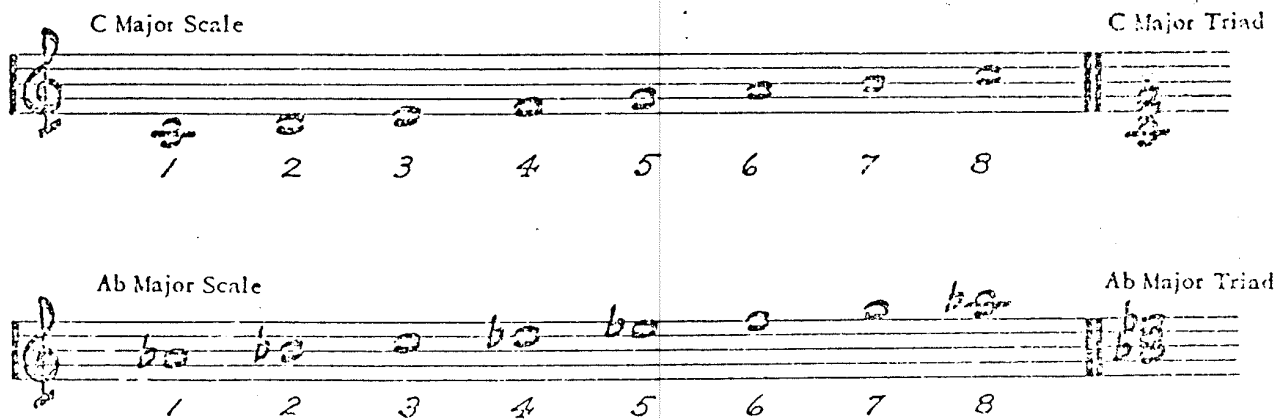
Ex. 18

The assignment work called for in this lesson should give you a good working knowledge of these simple rhythms, and an excellent foundation for understanding the syncopated and more complex rhythms to be discussed in future lessons.

D. CHORD CONSTRUCTION (Part I)

Using as a basis the major scales which are to be constructed as part of your lesson one assignment, it is possible to build all of the basic chords which are used in modern harmony and arranging.

The first of the basic chord structures which we will develop is the major triad, a three-part chord derived from the first, third and fifth degrees of the major scale.



Ex. 19

However, since simple triads are rarely used in modern writing we shall immediately move on to the more modern and fuller sounding version of major, the major 6th chord. The major 6th is a four-part chord derived from the first, third, fifth and sixth degrees of the major scale.

The image shows two musical staves. The top staff is for the C Major Scale, starting on middle C (C4) and ascending to C5. The notes are C, D, E, F, G, A, B, C. Below the notes are numbers 1 through 8. To the right of the staff is a C Major Sixth chord, consisting of C4, E4, G4, and A4. The bottom staff is for the Ab Major Scale, starting on Ab4 and ascending to Ab5. The notes are Ab, Bb, C, Db, Eb, F, G, Ab. Below the notes are numbers 1 through 8. To the right of the staff is an Ab Major Sixth chord, consisting of Ab4, Bb4, C5, and Db5.

Ex. 20

As may be seen, the major and the major sixth are basically of the same tonality, and throughout the course we will use the major 6th chord exclusively.

All types of chords are built from scales. At this time, however, it is important to learn and construct all of the major chords. This is accomplished through the development of "chord blocks" as below.

SAMPLE PROBLEM

Fill in the open blocks.

Ex. 21

6				(C)
5			(C)	
3		(C)		
1	(C)			
			(b)	(c) (d)

(The above exercise deals with major chords, hence the degrees 1, 3, 5, 6 are called for. (see Ex. 20). The note "C" was selected arbitrarily.

1. First fill in letter names without accidentals (sharps or flats).

a. To fill in the blocks with "C" as "1" is a simple matter; merely count up alphabetically and use the letter names corresponding to the numbers called for.

b. With (C) as "3", merely count down to "1" and up to "5" and "6".

--- G

A
1

 B

C
3

 D

E
5

F
6

 G A B ---

c. Similarly with (C) as "5" count down to "3" and "1" and up to "6".

D

F
1

 G

A
3

 B

C
5

D
6

 E F ---

d. Same treatment with (C) as "6".

--- B C D

E
1

 F

G
3

 A

B
4

C
5

 D --

The first step in the solution is now complete and the chord block should appear as follows:

Ex. 22

6	A	F	D	Ⓢ
5	G	E	Ⓢ	B
3	E	Ⓢ	A	G
1	Ⓢ	A	F	E

2. The second step is to check our major chord structures for necessary sharps or flats.

DO NOT ALTER THE GIVEN NOTE AT ANY TIME

- a. With C as "1" we refer to that scale which has "C" as the first degree and find no sharps and no flats, hence 1, 3, 5 and 6 in this case are correct as they appear.

6	A			
5	G			
3	E			
1	C			

(a) (b) (c) (d)

Ex. 23

- b. With C as "3", refer to that scale which has "C" (natural) as the 3rd degree. This we find to be the scale of A^b which has a key signature of four flats, (B^b, E^b, A^b and D^b).

We must, therefore, correct the letter names to suit the scale. In this case A and E must be flatted.

6	A ^b	F		
5	G	E ^b		
3	E	C		
1	C	A ^b		

Ex. 24

- c. With C as the fifth degree, we find that the appropriate scale is the scale of "F" with a signature of one flat. (Bb). However, since there is no "B" called for in this chord, the other notes remain unaffected.

6	A	F	D	
5	G	E ^b	Ⓒ	
3	E	Ⓒ	A	
1	Ⓒ	A ^b	F	
	(a)	(b)	(c)	

Ex. 25

4. With C as "6", we look for that scale which has the note "C" as the sixth degree. The proper scale in this case would be "Eb" with a signature of three flats (Bb, Eb, Ab).

The notes that are affected in this case would be "E" and "B", which must be flattened to conform to the scale.

6	A	F	D	Ⓒ
5	G	E ^b	Ⓒ	B ^b
3	E	Ⓒ	A	G
1	Ⓒ	A ^b	F	E ^b
	(a)	(b)	(c)	(d)

Ex. 26

ASSIGNMENT

- Write five different examples of semi-tones.
 - " " " " " whole-tones.
- Start with the scale of C, and through application of the tetrachord principle, work out all of the sharp key scales in both the treble and bass clefs.
- In the same manner, work out all of the flat key scales in both the treble and bass clefs.

4. Complete the following problems as illustrated.

(a)	C	is	the	fifth	note	of	the	scale	of	F	
(b)	F	"	"	third	"	"	"	"	"	"	<u>Bb</u>
(c)	Ab	"	"	second	"	"	"	"	"	"	<u>Gb</u>
(d)	D	"	"	seventh	"	"	"	"	"	"	<u>Eb</u>
(e)	F#	"	"	sixth	"	"	"	"	"	"	<u>A</u>
(f)	Eb	"	"	fourth	"	"	"	"	"	"	<u>Bb</u>

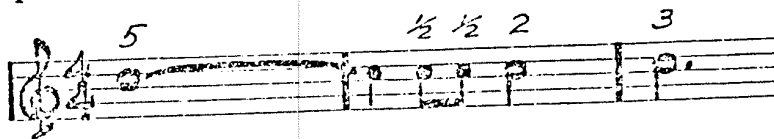
5. Complete the following problems as illustrated.

(a)	C	is	the	third	note	of	the	scale	of	Ab.
(b)	F#	"	"	<u>fifth</u>	"	"	"	"	"	B.
(c)	B	"	"	<u>third</u>	"	"	"	"	"	G.
(d)	C#	"	"	<u>sixth</u>	"	"	"	"	"	E.
(e)	Db	"	"	<u>seventh</u>	"	"	"	"	"	Ab.
(f)	C	"	"	<u>fourth</u>	"	"	"	"	"	Db.

6. Complete the following problems as illustrated.

(a)	D	is	the	third	note	of	the	scale	of	Bb.
(b)	<u>E</u>	"	"	seventh	"	"	"	"	"	F.
(c)	<u>Bb</u>	"	"	fourth	"	"	"	"	"	Gb.
(d)	<u>C#</u>	"	"	seventh	"	"	"	"	"	D.
(e)	<u>Ab</u>	"	"	sixth	"	"	"	"	"	Cb.
(f)	<u>Bb</u>	"	"	third	"	"	"	"	"	F#.

- Given are series of numbers. Write each of these series of duration in four-four time as shown in the accompanying example.



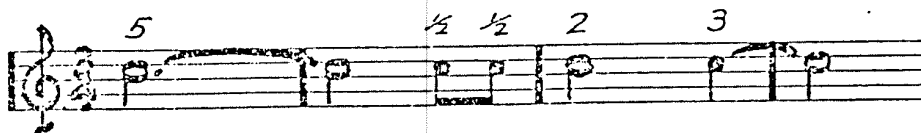
Ex. 27

- 3, 1, 2, 3, 1, 3, 2, 1, 2, 3, 1, 2, 2, 1, 3,
2, 1, 2, 3, 1, 3, 2, 1, 3

(b) 2, 1, 3, 1, 5, 3, 1, 1, 2, 1, 4, 4, 1, 2, 1,
1, 3, 5, 1, 3, 1, 2

(c) $\frac{1}{2}$, $\frac{1}{2}$, 2, 2, 1, 5, $\frac{1}{2}$, $\frac{1}{2}$, 4, 2, $\frac{1}{2}$, $\frac{1}{2}$,
 $\frac{1}{2}$, $\frac{1}{2}$, 5, 1, 2, 2, 1, 3, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$,
2, 4, $\frac{1}{2}$, $\frac{1}{2}$, 5

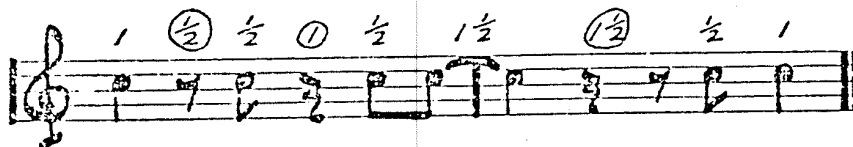
8. Write the same series of numbers, this time in three-four time.



Ex. 28

9. In this next problem dealing with rhythm, consider each of the circled numbers to indicate a corresponding period of rest.

The rhythm: 1, $\frac{1}{2}$, $\frac{1}{2}$, 1, $\frac{1}{2}$, 1 $\frac{1}{2}$, $\frac{1}{2}$, 1
would appear as follows in 4/4 time.



Ex. 29

Notate each of the following rhythmic phrases in 4/4 time.

(a) 2, 1, $\frac{1}{2}$, 1 $\frac{1}{2}$, 1, 3, 1, $\frac{1}{2}$, $\frac{1}{2}$, 1, 4, $\frac{1}{2}$,
 $\frac{1}{2}$, 3, 1, $\frac{1}{2}$, $\frac{1}{2}$, 2, 1, 5, 1, 1, 1 $\frac{1}{2}$, $\frac{1}{2}$,
1, 1, 3, 1, $\frac{1}{2}$, $\frac{1}{2}$, 1 $\frac{1}{2}$, $\frac{1}{2}$, 2.

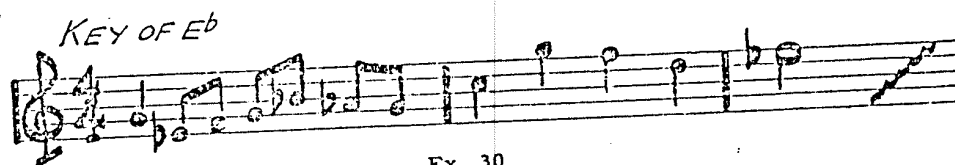
(b) 1, 1, 1, 1, $\frac{1}{2}$, $\frac{1}{2}$, 5, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, 3,
2, $\frac{1}{2}$, $\frac{1}{2}$, 3, 1 $\frac{1}{2}$, $\frac{1}{2}$, 1, 1, 2, $\frac{1}{2}$, $\frac{1}{2}$, 1,
2, 1, 1 $\frac{1}{2}$, $\frac{1}{2}$, 1, 4, $\frac{1}{2}$, $\frac{1}{2}$, 1, 4.

(c) 3, $\frac{1}{2}$, $\frac{1}{2}$, 1, 1, 1, 1 $\frac{1}{2}$, $\frac{1}{2}$, 2, 2, 1, 3,
 $\frac{1}{2}$, $\frac{1}{2}$, 7, $\frac{1}{2}$, $\frac{1}{2}$, 2, 2, 1, 1, $\frac{1}{2}$, $\frac{1}{2}$,
 $\frac{1}{2}$, $\frac{1}{2}$, 1, 4, 1, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, 1 $\frac{1}{2}$, 2.

10. Again referring to the rhythmic patterns given in Problem #9, notate each in 3/4 time.

11. Create a melody with a rhythm using notes of the Eb major scale and a four-four time signature. This melody should be eight bars long and contain scale notes only.

Since the purpose of this assignment is to further your familiarization with the notes contained in the various keys, it is advisable that you use accidentals where needed, rather than a key signature.



Ex. 30

12. Write eight bar melodies similar to that in Problem 11, but as follows:

Key of A . . 4/4 time
Key of F . . 4/4 time
Key of Db. . 4/4 time
Key of E . . 3/4 time

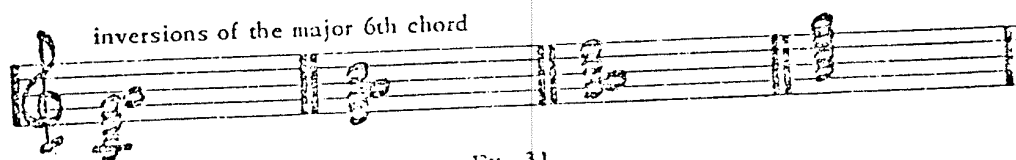
Key of Ab. . 4/4 time
Key of D . . 3/4 time
Key of Bb. . 4/4 time
Key of G . . 3/4 time

13. Construct major chord blocks as described in this lesson on each of the following notes. (See enclosed work sheet) C, F, Bb, Eb, B, E, A, D, G.

14. Write out each of the following major chords in musical notation with:

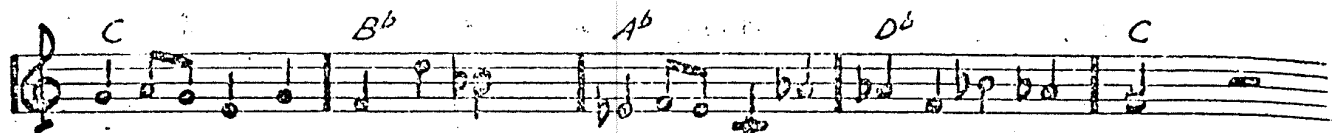
- (a) Root as bottom note
- (b) 3rd " " "
- (c) 5th " " "
- (d) 6th " " "

on: C, Db, D, Eb, E, F, F#, Gb, G, Ab, A, Bb, B.



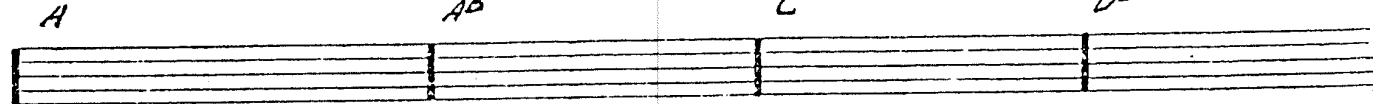
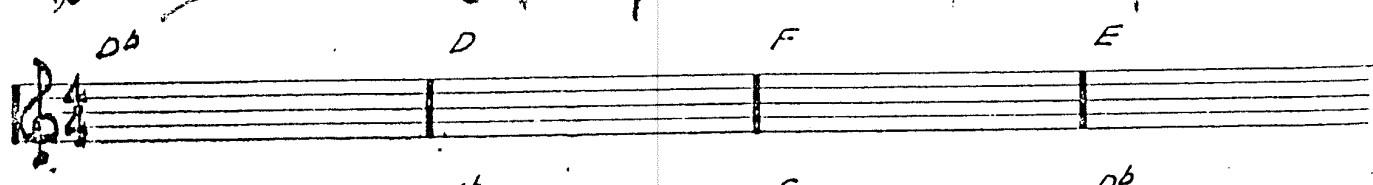
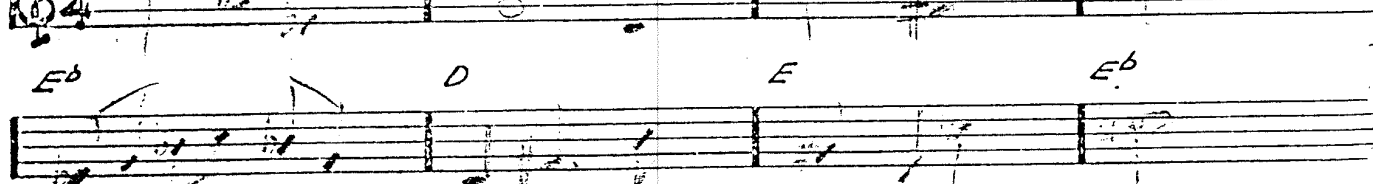
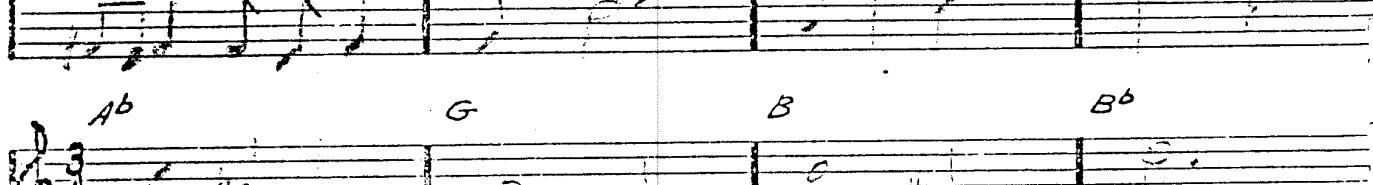
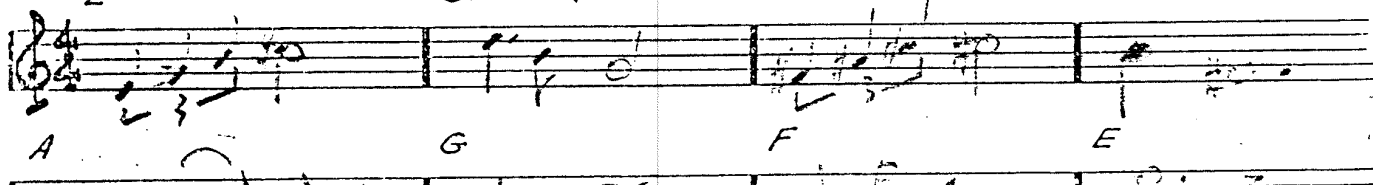
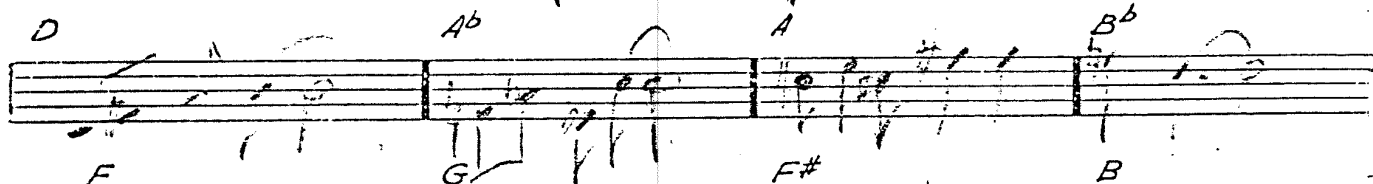
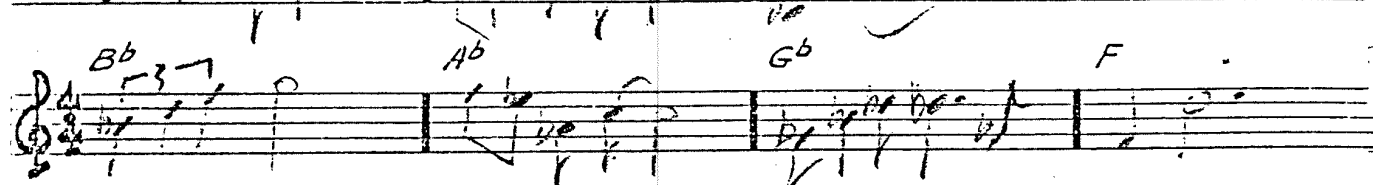
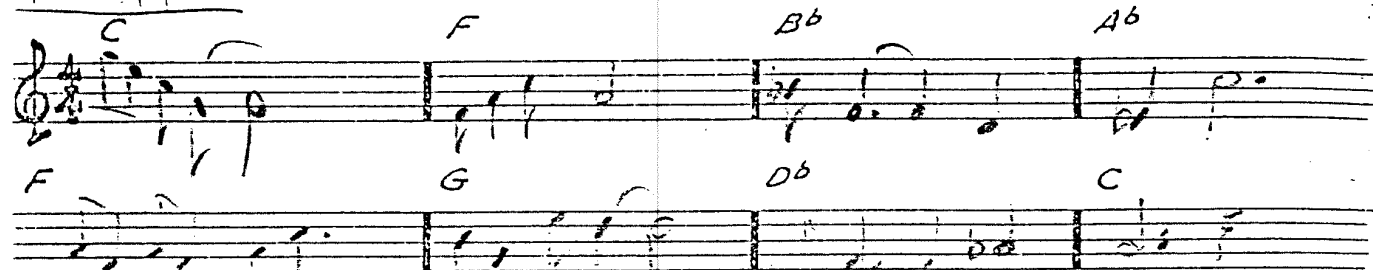
Ex. 31

15. The following problem is designed to familiarize you with major sixth chord structures. In composing the original melodies this time, use only chord notes of the major chord indicated above each bar.



Compose original melodies on the following progressions using chord notes only.

Allegretto

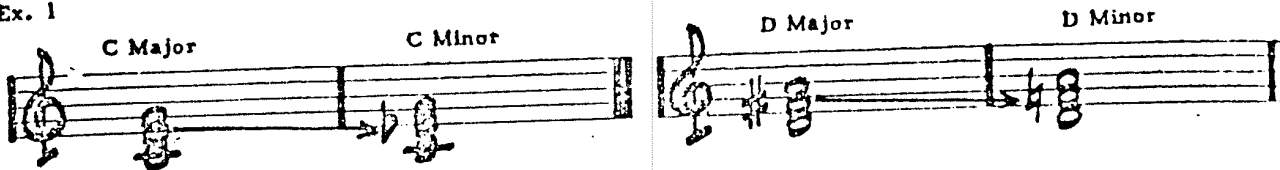


LESSON NO. 2

CHORD CONSTRUCTION (Cont'd)

continue with our study of chords as begun in Lesson No. 1, we shall now discuss and construct several more of the standard chord structures. The first of these is the Minor Triad. To construct the minor triad, simply refer to the major triad and lower the third degree one-half step.

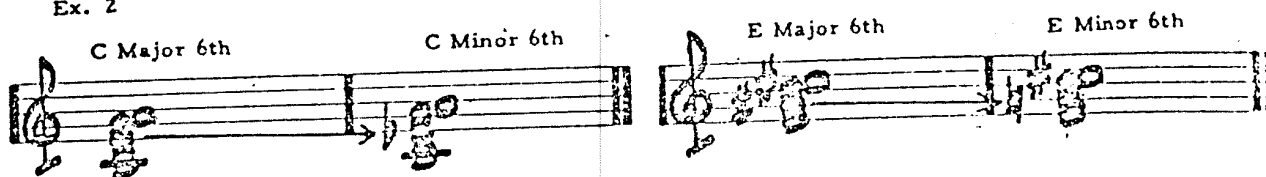
Ex. 1



in naming the lowered third degree, remember that if the original major third was sharped, the lowered third will be natural; if the major third was a natural, the lowered third will become a flat; and in the event that the major third was preceded by a flat, the lowered third will become a double flat (bb).

As explained in Lesson No. 1 the simple triad is rarely used in modern chord voicing, so once again, we move on to the more commonly used minor chord with the added sixth. The Minor Sixth chord may be found by referring to the major sixth and simply lowering the third degree one-half step.

Ex. 2



Once again in order to properly construct and learn all of the minor sixth chords, it is advisable to make use of the "chord block" technique as described in Lesson No. 1. Here is a sample problem in constructing minor sixth chord blocks.

SAMPLE PROBLEM

Fill in the open blocks

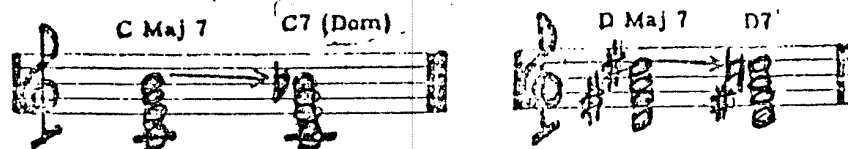
Ex. 3

6	A	F#	D	©
5	G	E	©	A
3	Eb	©	Ab	F
1	©	A	F	D
	(a)	(b)	(c)	(d)

(The above exercise deals with minor chords, hence the degrees -- one, lowered three, five and six are called for)

To continue with our study of the basic chord structures, we shall next consider the Dominant Seventh Chord, a four-part chord which is derived from the first, third, fifth and lowered seventh degrees of the major scale. The simplest method however, is to refer to the major seventh chord and lower the seventh degree one-half step.

Ex. 10



As in the case of the lowered third, if the original major seventh was a sharpened note, we lower it by making it natural; if the original major seventh was a natural the lowered seventh will become a flat; and in the event that the major seventh was already a flatted note, the lowered seventh would be double flatted (bb).

As we have already done with the major and minor chords, the chord block technique may once again be employed in constructing and learning all of the dominant seventh chords.

SAMPLE PROBLEM

Fill in the open blocks

Ex. 11

LOWERED	7	Bb	Gb	Eb	⊙
	5	G	Eb	⊙	A
	3	E	⊙	A	F
	1	⊙	A	F	D
		(a)	(b)	(c)	(d)

Since this exercise deals with dominant seventh chords the degrees one, three, five and lowered seventh are called for.

SOLUTION:

1. Fill in letter names without accidentals using

- C as the root
- C as the third
- C as the fifth
- C as the lowered seventh

Ex. 12

LOWERED	7	B	G	E	⊙
	5	G	E	⊙	A
	3	E	⊙	A	F
	1	⊙	A	F	D
		(a)	(b)	(c)	(d)

2. Next we check the dominant seventh chord structures for necessary sharps or flats.

- a. With C as the root we refer to the C major scale. All of the notes are correct as they stand with the exception of the seventh degree "B", which must be lowered to conform to the chord structure (dominant seventh).

Ex. 13

lowered	7	B ^b
	5	G
	3	E
	1	C

(a)

- b. With C as the third, the appropriate scale would be A^b, with a signature of four flats. In addition to flattening the A and the E to conform to the scale, the G must also be lowered to conform to the chord structure.

Ex. 14

lowered	7	B ^b	G ^b
	5	G	E ^b
	3	E	C
	1	C	A ^b

(a) (b)

- c. With C as the fifth degree of the F scale the only alteration necessary would be to lower the seventh degree from E to E^b.

Ex. 15

lowered	7	B ^b	G ^b	E ^b
	5	G	E ^b	C
	3	E	C	A
	1	C	A ^b	F

(a) (b) (c)

- d. Here we base our figuring on the fact that the note C is already the lowered seventh of some scale - in this case, the scale of D. We know that in the scale of D major the C is

sharped. Hence, the given C natural is correct as the lowered seventh in the scale of D. The third degree is F#.

Ex. 16

7	B ^b	G ^b	E ^b	Ⓢ
5	G	E ^b	Ⓢ	A
3	E	Ⓢ	A	F#
1	Ⓢ	A ^b	F	D
	(a)	(b)	(c)	(d)

(Before going on, it would be advisable to complete Problems No. 4 & 5 of the assignment.)

NOTE: The following chord symbols are used in reference to the chord structures discussed in Lessons No. 1 and 2.

C C Major (6)
 Cm C Minor (6)
 CMaj7 C Major Seventh
 C7 C Dominant Seventh

B. HARMONIC CONTINUITY

The first actual arranging technique which we will discuss is the principle of Harmonic Continuity, a method of producing smooth voice-leading in a given chord progression. Once you are completely familiar with this technique it is a relatively simple matter to write interesting, effective backgrounds for any instrumental or vocal combination.

In these continuities any chord may appear in any inversion, but no matter what the inversion, we shall name the notes in terms of voices rather than degrees. In other words, we shall consider the top note of the chord to be the first voice, the next note below it to be the second voice, and so forth.

3	2	1
III	IV	V
V	VI	I
VI	VII	II
I	II	III

Ex. 17



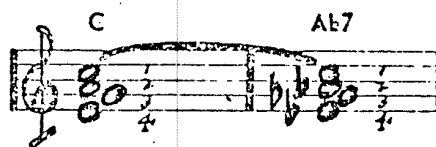
Once the position of the first chord is determined, to produce smooth voice leading to the following chord simply apply the basic principle of harmonic continuity, i.e., KEEP COMMON TONE (OR TONES) IN SAME VOICE (OR VOICES).

To clarify this rule, let us assume that we are moving from a C chord to Ab7 chord. We know that the notes of the C chord are C, E, G, A, and that the notes of the Ab7 chord would be Ab, C, Eb, Gb. In this

El yughi anapruv is uson vora va upmura crup
 ilia yuvh

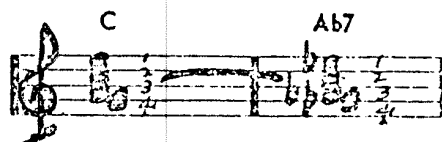
case, the only common tone would be the note C, i.e., the only similar note found in both chords. In the following example, C appears as the first voice of the C chord, therefore, the C must remain as the first voice of the Ab7 chord, with the rest of the chord notes of the Ab7 being filled in below the C.

Ex. 18



Were the C chord in the following position with the C as the second voice, then the C would become the second voice of the Ab7 chord and the following position would result.

Ex. 19



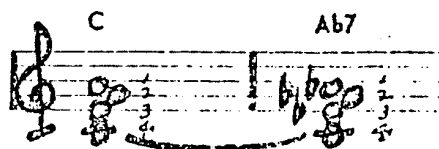
In the event that the C chord were voiced so that the C was in the third or fourth voice, the Ab7 would appear as follows:

Ex. 20

(a)

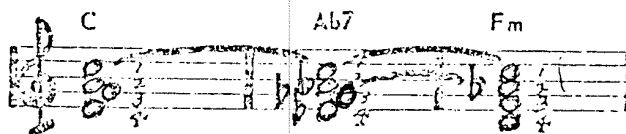


(b)



To go on let us assume that the Ab7 chord was followed by an Fm chord. Now, a common tone relationship must be established between the Ab7 chord and the Fm chord. The notes of the Ab7 chord are Ab, C, Eb, Gb, the notes of the Fm chord are F, Ab, C, D. In this case there would be two common tones -- Ab and C (they appear in both chords), and to produce smooth voice leading they must be kept in the same voices.

Ex. 21



Handwritten notes at the bottom of the page: "Peter's music for ex 18, 19, 20, 21" and "Edo-550 analysis".

in the book: $m_6 = m_6$

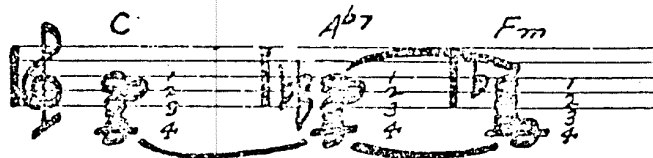
Δ^6

Had the starting chord been in this position:



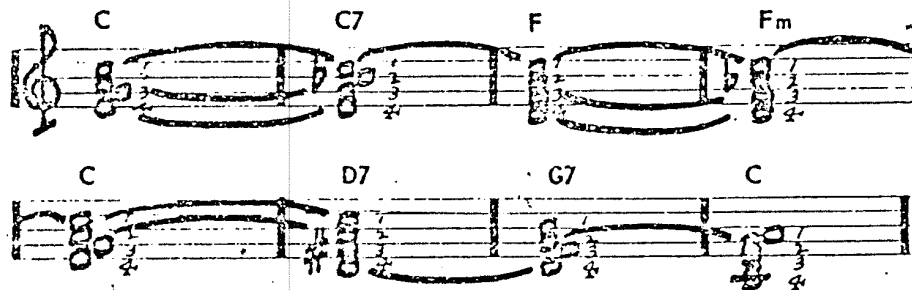
the voice leading of these three chords would appear as follows:

Ex. 22



Here is a longer example of a harmonic continuity with the common tones indicated. The position of the starting chord was arbitrary.

Ex. 23

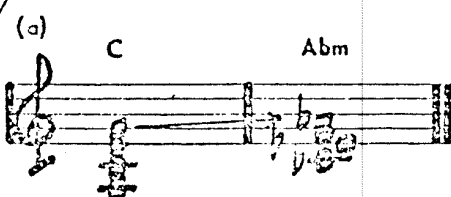


Occasionally there will occur a situation where there are no common tones between adjacent chords. In this case observe the following principle:

WHERE THERE ARE NO COMMON TONES BETWEEN ADJACENT CHORDS: MOVE THE FIRST VOICE TO THE NEAREST CHORD TONE OF THE NEXT CHORD (EITHER ABOVE OR BELOW) AND CONSIDER THIS TO BE THE FIRST VOICE OF THE NEW CHORD.

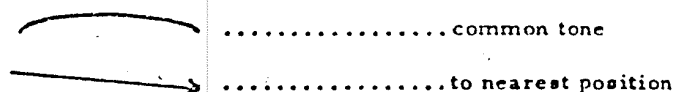
In the case of C to Abm (no common tone), either of the following would be correct.

Ex. 24

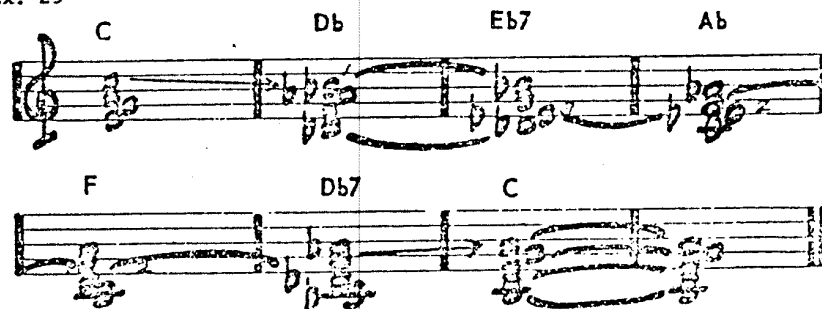


$C-E-G-A \quad | \quad A^b-C^b-E^b-F \quad |$

Here is a continuity incorporating this principle as well as the one previously discussed.



Ex. 25



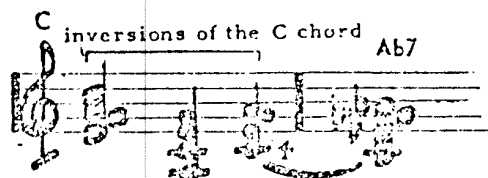
As you work out these harmonic continuities you will notice that the progression has a tendency to move downward on the staff. This is a result of the natural downward tendency of most harmonic resolutions, one of the points that will be covered later in the course when we deal with the problems of setting up our own chord progressions or reharmonizing those that we are working with.

The following simple principle allows us to control the range of the continuity, a necessary device when we apply these chord patterns to orchestral writing.

AS LONG AS THE CHORD REMAINS THE SAME; POSITION MAY BE FREELY CHANGED WITHOUT REGARD TO VOICE LEADING.

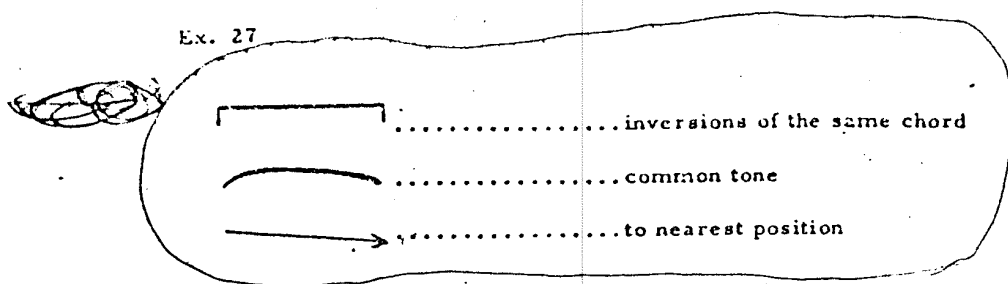
AS SOON AS THE CHORD CHANGES HOWEVER, THE COMMON TONE PRINCIPLE MUST BE OBSERVED.

Ex. 26



Now, to make sure that all of the foregoing is perfectly clear, here is a continuity containing all three of the principles applying to harmonic continuity.

Ex. 27



ASSIGNMENT

- Work out all minor sixth chord blocks indicated on the enclosed sheet.
- Notate minor sixth chords in all four inversions on each of the following notes:
C, Db, D, Eb, E, F, F#, Gb, G, Ab, A, Bb, B.

Ex. 28 inversions of the Minor Sixth chord

- Notate in all inversions, all major seventh chords. (same list as in Problem No. 2)

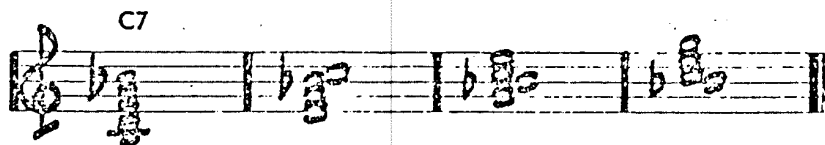
Ex. 29 inversions of the Major Seventh chord

Work out dominant seventh chord blocks as indicated on the enclosed sheet.

5. Notate inversions of the Dominant Seventh chord, again referring to the list of root tones given in Problem No. 2.

Ex. 30

inversions of the Dominant Seventh chord



6. Write harmonic continuities on the following chord progressions. In working out these continuities be sure to consider all of the principles covered in this lesson.

(See Ex. 27)

(u i u i r u)

(a) F F⁷ B^b E^b7 F G⁷ C⁷ F

(b) D B⁷ E⁷ A⁷ C D⁷ G G⁷

(c) A^b B^b7 E^b G^b7 A^b E⁷ E^b E^b

(d) B^b B^b7 E^b A^b7 B^b #C⁷ A⁷ B^b

(e) F F^m C D⁷ F G⁷ D^b7 C

(f) E E⁷ A A^m E F[#]7 B⁷ E

7. Set up a harmonic continuity plus an original melody on each of the following chord progressions using a three stave score as in the example below:

Ex. 31

Original melody
using chord notes only

Harmonic Continuity

Root tone of chord

C Ab7 F

(a) C Gb7 F Bb7 C D7 Db7 C

(b) Db Eb7 Ab Bb7 Db A7 Ab As

(c) Bb C7 F Ab7 Bb Gb7 F F

(d) G Db7 C C7.7 G A7 Ab7 G

(e) Db F7 Bb7 Eb7 Gb D7 Db Db

(f) Eb B7 Ab Bb7 Eb F7 E7 Eb

LESSON NO. 3

A. CHORD CONSTRUCTION (Cont'd)

To continue with our study of the basic chords which are used in dance band work, we will next consider the Minor Seventh Chord. The minor seventh is a four-part chord based on the root, lowered third, fifth, and lowered seventh of the major scale. A simple method which may be used to find the minor seventh chord would be to refer to the dominant seventh and lower the third degree one-half step.

Ex. 1 (a)



(b)



Once again in order to be certain that all of the minor seventh chords will be learned and constructed properly, we make use of the "chord block" technique as described in Lessons No. 1 and 2.

SAMPLE PROBLEM

Fill in the open blocks.

Ex. 2

LOWERED	7				Ⓒ
	5			Ⓒ	
LOWERED	3		Ⓒ		
	1	Ⓒ			
	(a)	(b)	(c)	(d)	

Since we are dealing with the minor seventh chord, the degrees one, lowered three, five and lowered seven are indicated.

SOLUTION:

1. Determine letter names:

- with C as the root
- with C as the lowered third
- with C as the fifth
- with C as the lowered seventh

Ex. 3

LOWERED	7	B	G	E	Ⓒ
	5	G	E	Ⓒ	A
LOWERED	3	E	Ⓒ	A	F
	1	Ⓒ	A	F	D
	(b)	(c)	(d)	(e)	

2. Add whatever sharps or flats may be needed to produce the minor seventh chord structure.

- a. with C as the root, we refer to the C major scale (no sharps or flats) and lower the third and seventh degrees, i.e., E and B to conform to the chord structure.

Ex. 4

LOWERED	7	B ^b
	5	G
LOWERED	3	E ^b
	1	C

(a)

- b. We find that C is the lowered third of the scale of A. (C# would be the regular third). We must also lower the scale seventh G# to G.

Ex. 5

LOWERED	7	B ^b	G
	5	G	E
LOWERED	3	E ^b	C
	1	C	A

(a) (b)

- c. With C as the fifth degree, we must refer to the scale of F. Again, to conform to the minor seventh chord construction, we lower both the third and the seventh degrees.

Ex. 6

LOWERED	7	B ^b	G	E ^b
	5	G	E	C
LOWERED	3	E ^b	C	A ^b
	1	C	A	F

(a) (b) (c)

- d. With C as the lowered seventh degree, the proper scale would be D major (regular seventh degree, C#). In addition to the lowered seventh degree the scale third, F#, must also be lowered to become F natural.

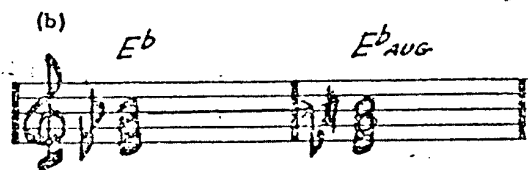
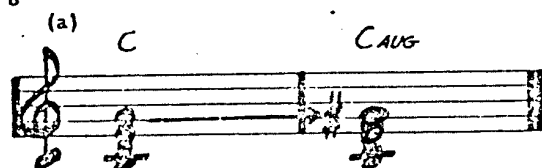
Ex. 7

LOWEROED	7	B ^b	G	F ^b	⊙
	5	G	E	⊙	A
LOWEROED	3	F ^b	⊙	A ^b	F
	1	⊙	A	F	D
		(a)	(b)	(c)	(d)

I-III-#V

next basic chord structure to be discussed is the Augmented Triad, a three-part chord based on the first, third, and raised fifth degrees of the major scale. A simple way to find the augmented triad would be to refer to the major triad and raise the fifth degree one-half step.

Ex. 8



As stated previously, three-part chords are not often used in dance band arranging. The more commonly used form of this chord is the Augmented Seventh. In relation to the major scale, the augmented seventh chord would consist of the first, third, raised fifth, and lowered seventh degrees. However, a simpler method would be to refer to the dominant seventh chord and raise the fifth degree one-half step.

Ex. 9



It will not be necessary to work out chord blocks on the augmented seventh. If you are already roughly familiar with all of the dominant seventh chord structures, you should have no difficulty in getting to know the augmented sevenths.

I-bIII-bV

Another of the chords with which you must be familiar is the Diminished Triad. The diminished triad is a three-part chord derived from the first, lowered third, and lowered fifth of the major scale. It may also be located by referring to the minor triad and simply lowering the fifth degree one-half step.

Ex. 10

(a) *Cm* *Cdim* (b) *Dm* *Ddim*

I - bIII - V - bbVII

Since we will need a four-part version of the chord for our arranging work, we move on to the Diminished Seventh Chord, a four-part chord derived from the first, lowered third, lowered fifth and doubly lowered seventh of the major scale. Although it is called a seventh chord, the simplest method for building it would be to refer to the minor sixth chord and lower the fifth degree one-half step.

Ex. 11

(a) *Cm(b)* *Cdim* (b) *Fm(b)* *Fdim*

I - bIII - bV - VI

Another feature of the diminished chord is that enharmonic spelling may be used freely without regard to scale degrees, i.e., F# may be called Gb; Bbb may be called A, etc. In the following illustration any of the chord spellings shown would be considered to be correct.

Ex. 12

(a) *Cdim* (b) *Cdim* (c) *Cdim*

Again, as in the case of the augmented seventh chord, it will not be necessary to work at diminished seventh chord blocks. A thorough knowledge of the minor sixth should enable you to locate the diminished chord structure with little difficulty.

B. CHORD SYMBOLS

Every chord structure is designated by a special abbreviated name. Following is a complete listing of the basic chord structures which we will use, and the symbols that identify them.

STRUCTURE

C Major
C Minor
C Major 7th
C Dominant 7th
C Minor 7th
C Augmented 7th
C Diminished 7th

SYMBOL

C
Cm or C-
C Maj. 7
C7
Cm7 or C-7
C Aug or Cx
C dim or Co

In addition to these basic structures, you may occasionally encounter so-called "altered chords", where one of the regular chordal functions has been altered to produce a sound slightly different from that of the basic chord.

STRUCTURE

SYMBOL

NOTATION

D minor 7, lowered 5th

Dm7 (b5)



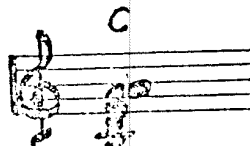
C. OPEN HARMONY

All of the chord positions that we have covered thus far belong to a general classification known as closed harmony. In addition to these closed voicings, certain open voicings may often be effectively used. A simple method for converting any chord from closed to open position may be described as follows:

TO PRODUCE OPEN HARMONY, DROP THE SECOND VOICE (FROM THE TOP) OF ANY CLOSED CHORD DOWN ONE OCTAVE.

To illustrate this principle let us assume that we have a C major chord in the following closed position.

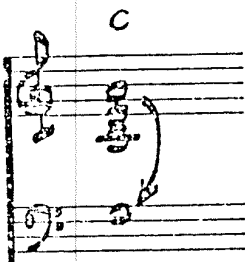
Ex. 13



Για να δημιουργήσω
έναν αρμονία, να βάλω
τη δεύτερη φωνή στο
δουπόπλο ή στο ούτιλο.

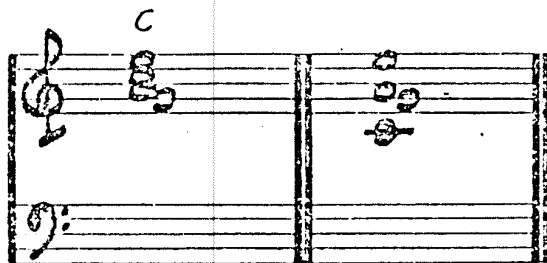
To convert this chord from closed to open position we would simply drop the second voice, G, down one octave.

Ex. 14



If the closed C major chord had been voiced with the note E on top, dropping the second voice would result in the following open version of the C major chord.

Ex. 15



Here are several more illustrations of open chords formed by dropping the second voice of closed chords.

(a) *F7*

(b) *Dm*

(c) *A♭7*

Ex. 16

$E\flat$ III
 C I
 $B\flat$ VII
 G V

I V II IV
 C - G - $B\flat$ - C
 G

OTE: When using open harmony, we may distribute the chord notes between the treble and the bass clefs, using the bass clef wherever the notes become so low that it would be inconvenient to write them in the treble clef. It is not necessary to keep a specified number of notes in each clef. Rather, use the bass clef where convenient to avoid the necessity of drawing ledger lines.

Ex. 17

It is of course possible (and quite effective musically) to apply the principle of open harmony to a harmonic continuity (See Lesson No. 2). Here is an example of a continuity:

- a. in closed position
- b. converted to open position by dropping the ⁺second voice down one octave

Ex. 18

ASSIGNMENT

1. Work out minor seventh chord blocks as indicated on the enclosed sheet.
2. Notate the following minor seventh chords in all four inversions:
C, Db, D, Eb, E, F, F#, Gb, G, Ab, A, Bb, B
3. Notate augmented seventh chords in all four inversions on the same list as given in problem No. 2.
4. Notate diminished seventh chords in all four inversions on the same list as given in problem No. 2.
5. In order to have a convenient guide to refer to as you work, complete the enclosed chord reference chart by filling in each chord in the appropriate space as illustrated
6. Convert the following closed chords to open position:

Ex. 19

(a) C7 (b) G^{aug}7 (c) E^b7 (d) A^bm7 (e) D7 (f) E^m

7. Set up harmonic continuities as described in Lesson No. 2 on each of the following chord progressions. Do not allow the top note of any chord to go below the note E.

Where voice leading would result in a lower lead note, change position of previous chord.

Ex. 20

C A7 Dm7 G7 C

Ex. 21

(a) C Gm7 C7 F Bb7

C D7 Dm7 Db7 C

(b)

G A^bo Am⁷ D⁷ G G⁷ C Cm

G B^bo Am⁷ A^b7 G F⁷ G

B^bo⁷ F^b Gm⁷(b5) C⁷

(c)

Fm⁷ A^bm B^b7 E^b D^b7 E^b

(d)

F A^bo Gm⁷ C⁷ F F[#]o Gm⁷ G^b7

F F⁷ B^b B^bm F E^b7 F

A^bm D⁷ G C⁷

(e)

D E⁷ Em⁷ E^b7 D

(ii)

B^b7 B^bm⁷ E^b7 A^b B^bm⁷ Cm⁷ E^o

B^bm⁷ E^b7 A^b D^bm A^b

Cm⁷ F⁷ Dm⁷ D^bo Cm⁷ F⁷ Dm⁷(b5) G⁷

Fm E^bo Dm⁷ G⁷ Cm⁷ B⁷ B^b

8. Re-score each of the continuities which you have written in problem No. 7, as illustrated below.

Ex. 22

Original melody using
chord notes only

Harmonic continuity
in open position

Root tone of chord

The musical notation for Example 22 consists of three staves. The top staff, labeled 'Original melody using chord notes only', is in treble clef and shows a melody for the chords Dm7, G7, and C. The middle staff, labeled 'Harmonic continuity in open position', is in treble and bass clefs and shows the harmonic structure for the same chords. The bottom staff, labeled 'Root tone of chord', is in bass clef and shows the root notes for the same chords. The chords are labeled above the top staff: Dm7, G7, and C.

CHORD REFERENCE CHART

MAJOR(6) MINOR(6) MAJ. 7th DOM. 7th MIN. 7th AUG. 7th DIM. 7th

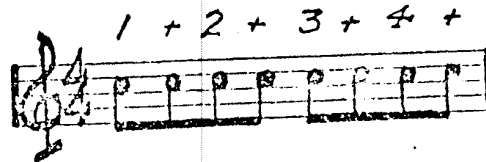
LESSON NO. 4

A. RHYTHM (Cont'd)

For preparation in the development and usage of swing figures, we here analyze the rhythm factors which tend to produce a feeling of "swing".

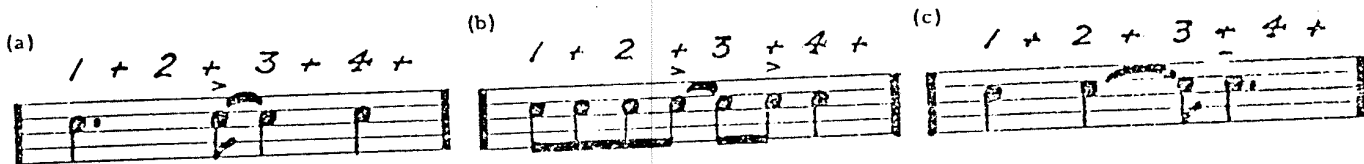
First, let us consider the fact that a four-four bar contains eight eighth notes.

Ex. 1



Swing consists generally of a combination of accents in the above bar where at least one accent does not occur on the beat, i.e., one of the accents must occur on one of the "&'s" rather than directly on the one, two, three or four.

Ex. 2

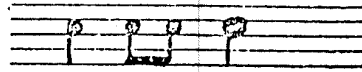


In order to avoid confusion in locating and naming "off-beat" attacks, we shall rely on a system of naming whereby every eighth note gets one beat. Using this system (i.e., eighth note gets one beat), the following durations may be represented by a single note:

NOTE	DURATION	EQUIVALENT REST
	1 beat	
	2 beats	
	3 beats	
	4 beats	
	6 beats	
	8 beats	

The rhythm " 2 1 1 4 " would appear as follows:

Ex. 3

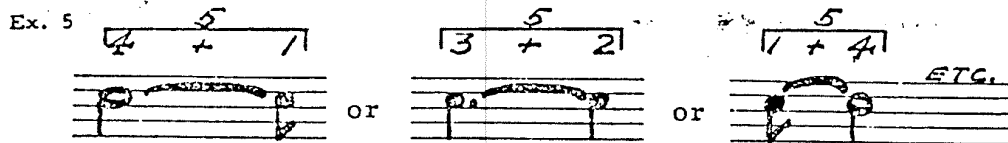


Following are several bars of rhythm notated according to this method of naming:



Each bar should, of course, add up to eight "eighth" beats.

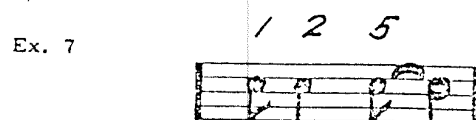
Whenever a duration can not be represented by a single note, a "tie" is used to link two notes into one duration. The duration "5" might be indicated as:



To illustrate further, the rhythm "5" plus "3" would be notated as follows:



The rhythm "1" plus "2" plus "5" would be notated:



The arranger, or composer, must follow a definite system of notation so that even the most intricate swing rhythms may be read easily and accurately. The three principles by which this may be accomplished are as follows:

1. A NOTE, WHETHER HEARD OR NOT, SHOULD APPEAR ON THE THIRD BEAT OF EVERY BAR. THIS MAY BE ACCOMPLISHED BY SIMPLY PICTURING AN IMAGINARY BAR LINE IN THE MIDDLE OF THE BAR AND ONLY ALLOWING FOUR EIGHTHS (OR THEIR EQUIVALENT) TO SHOW ON EITHER SIDE OF IT.

Ex. 8

(a) 3 5

(b) 1 4 2 1

(c) 2 5 1

(d) 3 2 3

EXCEPTIONS:

2. WHEN TWO OR MORE CONSECUTIVE EIGHTH NOTES OCCUR IN A GROUP, THEY MAY BE "BEAMED".

Ex. 9

Beamed eighth notes

HOWEVER, DO NOT "BEAM" EIGHTH NOTES OVER THE IMAGINARY BAR LINES.

Ex. 10

RIGHT

WRONG

3. NOTES SHOULD ALWAYS BE SPACED IN THE BAR ACCORDING TO THE VALUATION, i.e., a half note in a four-four bar should occupy one-half of the total space in the bar; a dotted half note should occupy three-fourths of the bar, etc.

Ex. 11

BAD GOOD

BAD GOOD

(Complete problems #1 and #2 of the lesson assignment)

B. FOUR-PART HARMONIZATION OF A GIVEN MELODY

In this lesson we come to what is certainly one of the most important technique of arranging, i.e., how to harmonize a given melody in the modern "block" style. We will start out with a given melodic line with chord symbols and set up a four-part block harmonization suitable for adaptation to any instrumental combination.

In past lessons we have dealt exclusively with chord notes, i.e., notes contained in the given chord. When working with standard and popular tunes, however, we find that not all melody notes are simple chord notes. Therefore, for the present, we may analyze any melody note according to one of the following classifications:

1. Chord Notes
2. Non-chord Notes

In the following example a melody with chord symbols is given and each note of the melody has been analyzed as either a chord note (c), or a non-chord note (nc).

Ex. 12

C NC C NC NC C C C C NC C C NC C C

(Before continuing with the lesson, it would be advisable to complete Problem No. 3 of the assignment.)

- Once you are able to determine with little or no difficulty whether each note of the melody is a chord note or a non-chord note, the next step will be to fill out the chord under each and every note in "block style". Here are the rules for producing a four-part block harmonization.

1. HARMONIZE CHORD NOTES WITH CHORD, BUILDING DOWN FROM THE MELODY NOTE IN THE CLOSEST POSSIBLE INVERSION.

Ex. 13

given melody

block harmonization

2. HARMONIZE NON-CHORD NOTES WITH CHORD, BUILDING DOWN FROM THE MELODY NOTE IN THE CLOSEST POSSIBLE INVERSION, BUT LEAVING OUT THE NEAREST REGULAR CHORD NOTE JUST BELOW THE MELODY NOTE.

Bad
For example, if we were harmonizing the note "B" with a Cm chord (C, Eb, G, A), we would have to leave out the note "A" (the nearest chord note below "B") before filling in the rest of the chord notes.

Ex. 14

Cm

"A" omitted

Bullshit: C is closer. Closest poss. inversion is -

ok! But C is the closest below B. You see?

C Eb G A

Here are several more illustrations of the harmonization of non-chord notes.

Ex. 15

given melody

block harmonization

OMIT "C" OMIT "G" OMIT "A" OMIT "G" OMIT "A" OMIT "F"

Next, we move on to melodies which, like all standard and popular songs, will intermingle both chord and non-chord notes. Here is a melody of this sort complete with chord symbols, and an illustration of how it would be harmonized.

Ex. 16

Remember that this same procedure may be followed in effectively harmonizing any of the standard or popular melodies with which you are familiar. If scored and orchestrated properly, the resulting harmonizations, while quite simple, would nevertheless produce the same professional sound featured by many leading bands.

In cases where the three lower voices do not change between chords, a smoother effect may be achieved by sustaining, rather than re-attacking the notes. Remember that this applies only where each of the three lower voices would have repeated.

Ex. 17

might be treated:

In the following illustration, the lower three voices cannot be sustained, since they actually change from one chord to the next.

Ex. 18

Another situation where the above principle might be applied would be where both the melody and the lower voices remain the same. Here, it would be possible to move only the top part while the three lower voices sustain.

Ex. 19



or

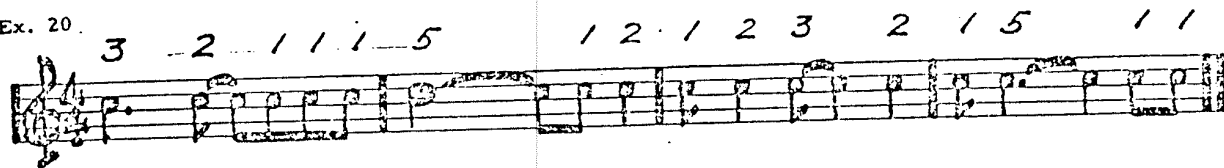


It would be wise to remember that regardless of how often this sustaining technique may be employed, it is far more effective in smooth ballads, rather than in "swing type" tunes. (It is also more generally used in saxes rather than in brass.)

ASSIGNMENT

1. Notate the following swing rhythms, as indicated in Example 20.

Ex. 20



5 3

5 2 1

5 1 2

1 2 2 3

5 1 1 1

3 5

2 1 5

1 2 5

3 1 2 2

1 1 1 5

3 2 3

3 2 2 1

3 2 1 2

3 1 1 3

3 2 1 1 1

3 3 2

2 1 3 2

1 2 3 2

3 3 1 1

1 1 1 3 2

2 3 3

2 3 2 1

2 3 1 2

1 1 3 3

2 3 1 1 1

4 1 3

2 1 2 3

1 2 2 3

1 3 1 3

1 1 1 2 3

3 4 1

4 1 2 1

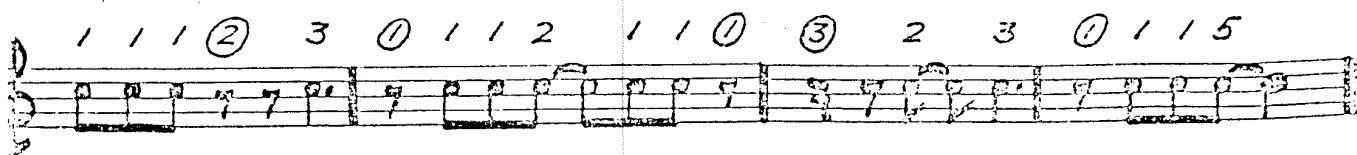
4 1 1 2

3 1 3 1

4 1 1 1 1

1 4 3	1 2 4 1	1 1 1 1 1 3	2 1 1 2 2
3 1 4	1 4 1 2	3 1 1 1 1 1	2 1 3 1 1
2 2 1 3	1 2 1 4	1 1 3 1 1 1	1 1 3 2 1
3 2 2 1	2 2 1 1 2	1 3 1 1 1 1	1 3 1 2 1
2 1 2 3	1 2 2 1 2	1 1 1 1 3 1	2 1 1 3 1
3 2 1 2	1 2 1 2 2	1 2 2 1 1 1	2 1 1 1 2 1
2 1 4 1	2 1 1 1 3	1 1 1 2 1 2	2 1 2 1 1 1
1 4 2 1	3 2 1 1 1	1 2 1 1 1 2	1 1 1 2 2 1
2 1 1 4	1 1 1 2 3	1 1 2 1 1 2	2 1 1 1 1 2
1 2 2 2 1	3 1 1 1 2	1 2 1 1 1 2	1 1 2 1 2 1
2 2 1 2 1	1 1 2 1 3	1 2 1 2 1 1	1 2 1 1 2 1
2 1 2 2 1	1 1 1 4 1	1 1 1 1 1 1 2	2 2 1 1 1 1
2 1 2 1 2	1 4 1 1 1	1 2 1 1 1 1 1	1 1 1 1 2 2
1 2 3 1 1	1 1 1 1 4	1 1 1 2 1 1 1	1 1 1 3 1 1
1 1 3 1 2	3 1 1 2 1	1 1 2 1 1 1 1	2 1 1 2 1 1
1 3 1 1 2	1 2 1 1 3	1 1 1 1 2 1 1	1 1 1 1 1 2 1
1 2 1 3 1	3 1 2 1 1	1 1 1 1 1 1 1 1	2 1 1 1 1 1 1

2. In the following problem, rhythms employing rests will be used. Remember that the principles of bar-subdivision apply to rests as well as to durations.



Ex. 21

Notate the following swing rhythms:

- a. 1, 1, 1, 2, (1), 1, 2, 2, (4), 1, 2, 1, 1, 1, 1, 2,
 (5), 1, 2, 2, 1, 1, (4), 3, 1, 1, 1, 2, (2), 4, 4, 2, (3).
- b. 2, (1), 1, 1, 1, (1), 2, 1, 1, 1, (1), 1, 1, 2, 5, 1, 2, (5), 1, 3, 1,
 1, 1, 1, (1), 3, 1, 1, 1, 2, 2, (2), 1, 1, 1, (1), 2, 1, 1, 1, (4).
- c. 7, 2, (6), 1, 1, 1, 1, 1, 2, 1, 2, (2), 2, 2, 1, 3, 2, (1), 3,
 3, 1, 1, 1, 1, (1), 3, 1, 1, (1), 1, 1, 1, 1, 2, (3).

3. Analyze each of the following melodies indicating chord notes (c) and non-chord notes (nc).

(a)

(b)

Handwritten musical score for guitar, featuring a melody line and a bass line. The score is written in treble and bass clefs, with various chords and notes indicated. The chords are labeled with letters and accidentals, such as Gm7, C7, F, Fm, D7, Dm7, G7, C, Bb, Am7, D7, G, G7, C, Cm, Bb, Am7, D7, G, F7, G, F, F7, Bb, Bbm, Gm7, C7, F, Em7, A7, Am7, D7, G, Bb, Am7, D7, G, F7, G, Fm7, Bb7, Eb, Fm7, Gm7, Gb, Fm7, Eb, Abm, Eb, and Fm7. The melody line consists of eighth and sixteenth notes, often beamed together. The bass line consists of eighth and sixteenth notes, often beamed together. The score is written in a single system, with the melody line on the top staff and the bass line on the bottom staff. The chords are written above the melody line and below the bass line. The score is written in a single system, with the melody line on the top staff and the bass line on the bottom staff. The chords are written above the melody line and below the bass line.

4. Harmonize each of the melodies from Problem #3 using the four-part block technique described in this lesson. Sustain three lower voices wherever possible.
5. Write a four-part block harmonization on any two standard tunes of your choice.

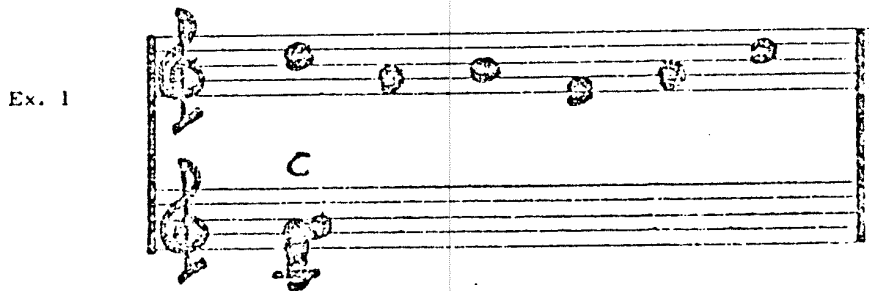
LESSON NO. 5

Skip to Lesson 7

A. PRINCIPLES OF IMPROVISATION

1. CHORD TONES

Notes of any given chord may be used in any order, frequency, or rhythm pattern against that chord.



2. CHROMATIC APPROACH NOTES

Any note which chromatically approaches a chord tone may be used in an improvisation. These approach notes are always of short duration. (♩ or less).



Notice that in the foregoing example each non-chord note chromatically approaches a regular chord note.

3. SCALE-WISE APPROACH NOTES

Any note which approaches a chord tone "scale-wise" may be used in an improvisation. (Scale-wise approaches must also be of short duration).

A prerequisite to understanding this technique is a knowledge of "chord scales".

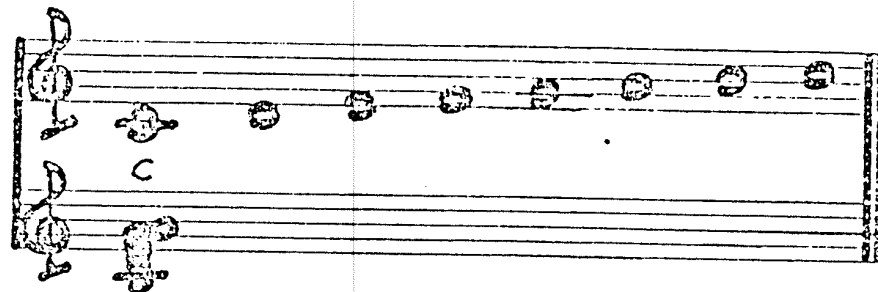
scale: up&down
wise: up&down

Διγάδι οι νότοι του λαβιαν
στον γιγαντα τον ηπίστρονον νότον

a. MAJOR (6th or 7th) (Ionian)

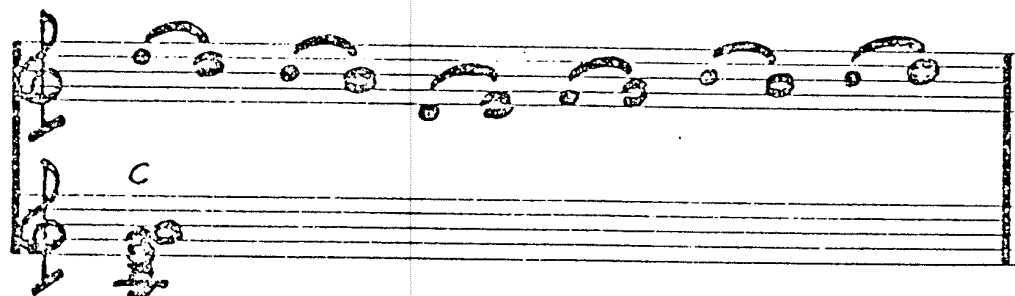
In the case of the major chord, no alteration is necessary. The major scale, as is, goes with the major chord.

Ex. 3



A non-chord scale note may be used in an improvisation if it approaches an adjacent chord tone. Notice in the following example that every non-chord scale note moves directly into the nearest chord note (either above or below).

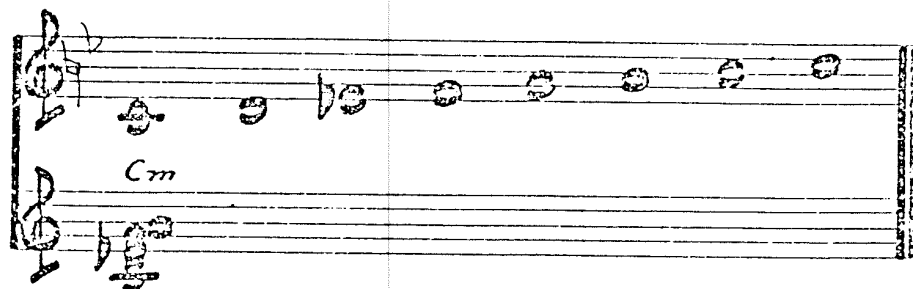
Ex. 4



b. MINOR (Melodic) *SEEMING ENOUGH. A MELODIC MINOR SCALE IS USED (m7+) OR BETTER m6(7+)* *Supposed to work as*

Since the third degree is lowered in the minor chord, the same alteration will be made in the minor "chord scale".

Ex. 5

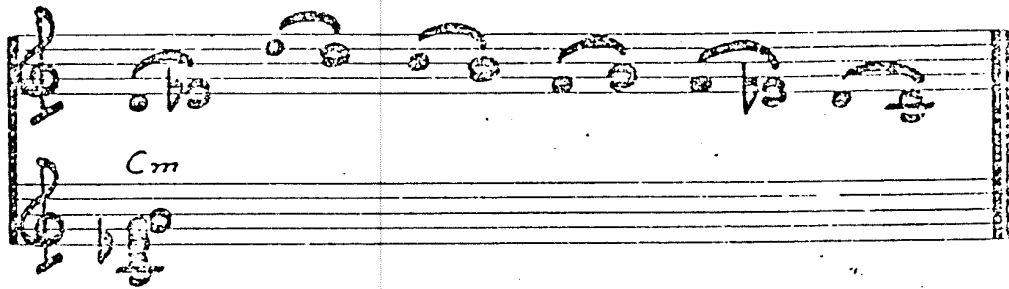


Again, an example of non-chord scale tones of the "minor chord scale" approaching adjacent chord tones.

C - D - Eb - F - G - Ab - Bb - C (pure minor - Aeolian)

b # 9

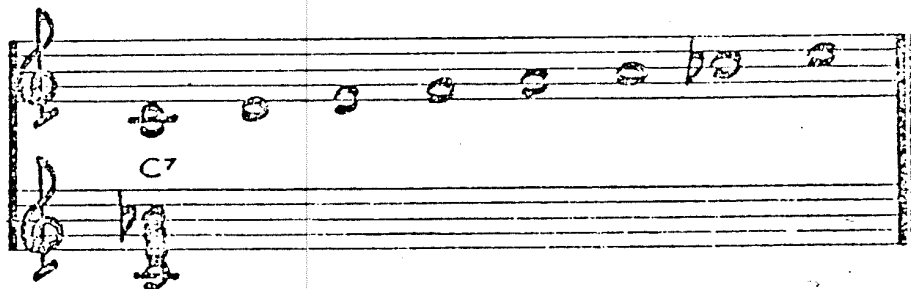
Ex. 6



c. DOMINANT 7th (Mixolydian)

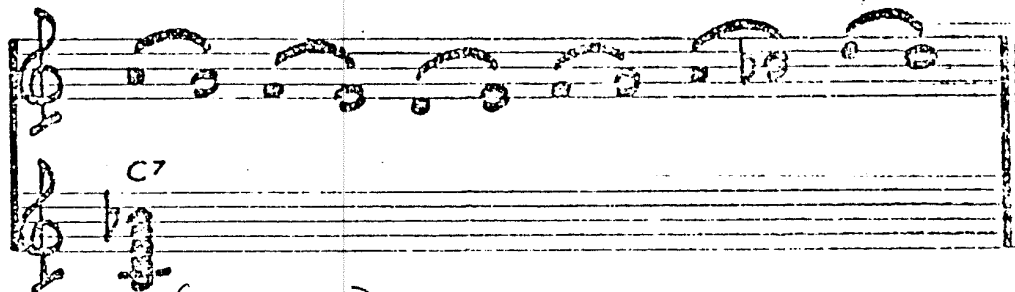
Here, the seventh degree is lowered in the chord scale just as it has been in the chord.

Ex. 7



Following is an example showing non-chord tones of the C7 chord scale moving into adjacent chord tones

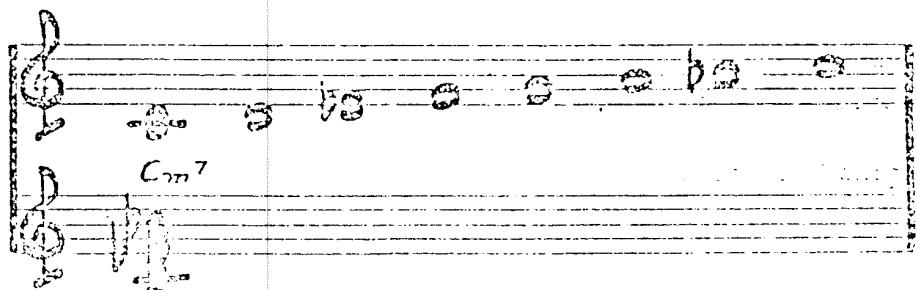
Ex. 8



d. MINOR 7th (Dorian) Limit function Dorian minor scale

In the minor seventh chord, both the third and the seventh degrees are lowered. The same alterations have been made in the chord scale.

Ex. 9



Every non-chord scale tone in the following example moves directly into the nearest chord tone.

Ex. 10

e. AUGMENTED 7th

Here the scale building procedure is slightly different. Instead of referring to, and altering the basic major scale, we construct a "whole-tone" scale, i.e., a scale composed solely of whole tone intervals.

Ex. 11

(Whole tone)

Note: This scale, necessarily, has only six notes plus the added octave instead of the usual seven.

Here is an example of scale-wise approaches into chord notes of the augmented seventh chord.

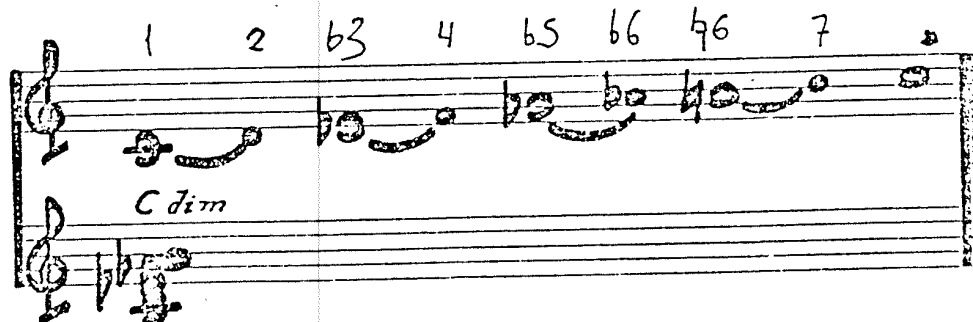
Ex. 12

f. DIMINISHED 7th

Again, without referring to the basic major scale, we build the altered scale for the diminished seventh chord, as follows:

Chord notes plus one whole step above each chord note.

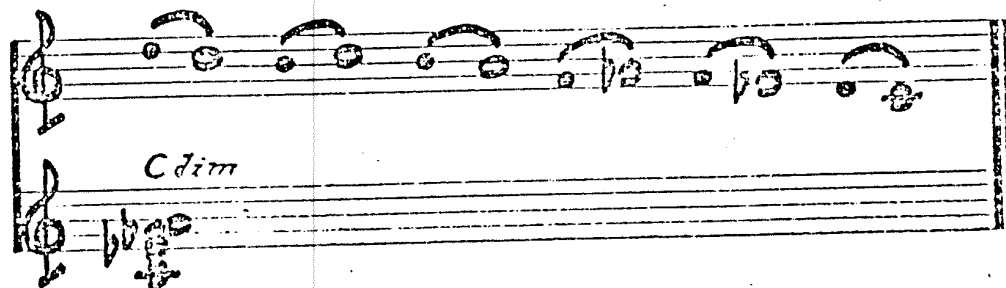
Ex. 13



Note: This scale will have eight notes, plus the added octave rather than the usual seven.

Following is an example showing scale tones approaching adjacent chord tones of the diminished chord.

Ex. 14



Note: When a minor seventh (b5) structure is indicated, use the chord scale of the dominant seventh chord found four half-steps below.

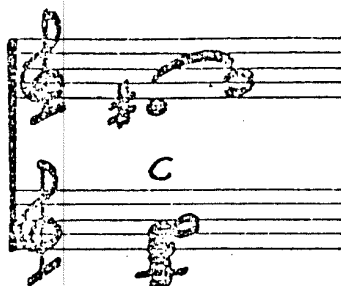
mixolydian (half-step up)

Em7 (b5) → use C7 chord scale → use Fmaj7 scale
 Bm7 (b5) - use G7 chord scale
 Fm7 (b5) - use Db7 chord scale

Typical mistakes in the use of approach notes are shown below:-

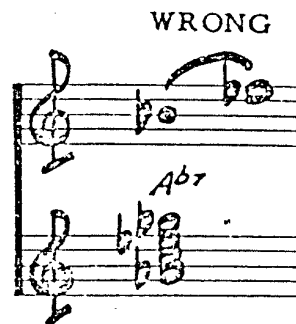
In the following example, although D# would be chromatic to a regular chord note of the C chord (E), in this case it cannot be considered to be a chromatic approach note since it is leaping into a chord note rather than approaching it chromatically.

Ex. 15



Similarly, the Bb in example 16 would be correct had it been followed by either C or Ab, but cannot be considered to be a scalewise approach to Eb, i. e., Eb is not an adjacent chord note.

Ex. 16



Ex. 17



In example 17, F# would not be correct since it is neither a chromatic approach note nor is it present as a scale tone in the C scale.

Note: Although the foregoing will produce excellent musical results in virtually every situation, this should not be considered as a final and complete coverage of scale-chord relationships. In some cases the scale will be determined, not by the structure of the chord, but, by its function in the overall tonality of the chord sequence. This will be covered in more detail in the section of the course dealing with chord progression.

B. IMPROVISATION

The ability to "ad lib", i. e., to improvise around a given melody, or to create an original melodic improvisation on a chord progression is as essential to the arranger as it is to the instrumentalist.

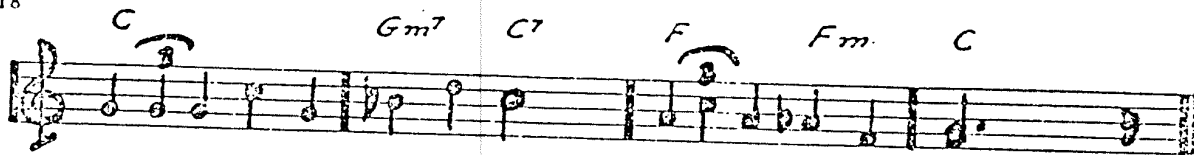
1. CREATING AN ORIGINAL IMPROVISATION ON A CHORD PROGRESSION.

a. CHORD NOTES

(Notes in *improvisation*)

As stated earlier in this lesson, chord notes may be freely used in creating original melodies.

Ex. 18

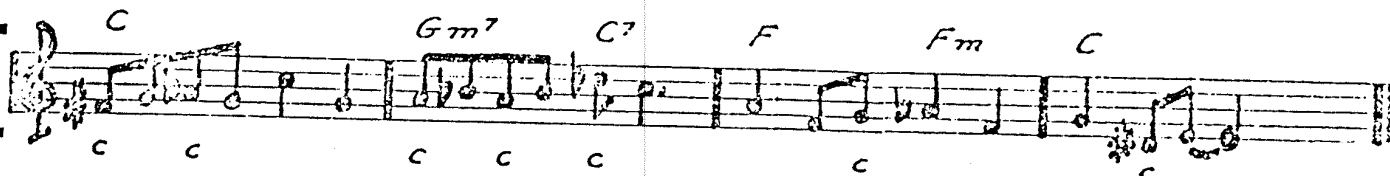


b. CHROMATIC APPROACH NOTES

(*Χρωματικό προσέγγιση στις νότες των*
improvisation)

Chromatic approach notes may precede any regular chord note provided that they resolve directly to that chord note.

Ex. 19

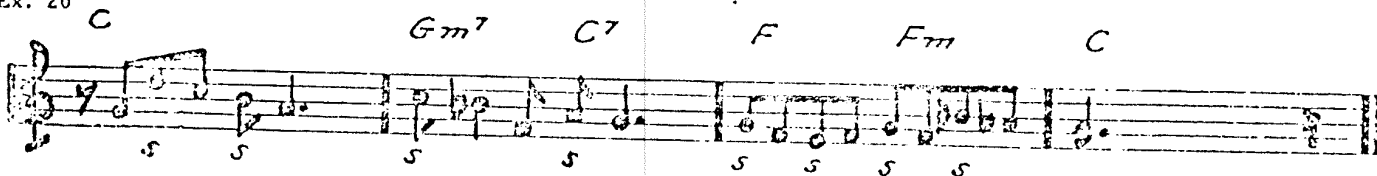


c. SCALEWISE APPROACH NOTES

(*Νότες της κλίμακας που οδηγούν*
στις νότες των
improvisation)

Non-chord notes which are present in the related chord scale may be used, provided that they resolve directly into an adjacent chord note and are of short duration.

Ex. 20



Following is an example of an original melody based on a given chord progression which utilizes:

- chord tones
- chromatic approach notes
- scalewise approach notes

IMPORTANT:—ALL APPROACH NOTES MUST BE OF SHORT DURATION.

Quarter notes which occur on the first or third beat should not normally be harmonized as approach notes.

Ex. 21

Example 21 consists of two staves of music. The first staff has a treble clef and a key signature of one flat (Bb). The notes are: Bb4, A4, G4, F4, E4, D4, C4, Bb3, A3, G3, F3, E3, D3, C3. The chords above the notes are: Dm7, G7, C, A7, Dm7, G7, C. The second staff has a bass clef and a key signature of one flat (Bb). The notes are: Bb3, A3, G3, F3, E3, D3, C3, Bb2, A2, G2, F2, E2, D2, C2. The chords above the notes are: Dm7, G7, C, Eb9, Dm7, G7, C.

To be certain that the foregoing is perfectly clear, here, once again, is an original melody composed exclusively of those materials covered in this lesson.

Ex. 22

Example 22 consists of two staves of music. The first staff has a treble clef and a key signature of one flat (Bb). The notes are: Bb4, A4, G4, F4, E4, D4, C4, Bb3, A3, G3, F3, E3, D3, C3. The chords above the notes are: F, Dm7, Gm7, C7, F, Dm7, Gm7, C7. The second staff has a bass clef and a key signature of one flat (Bb). The notes are: Bb3, A3, G3, F3, E3, D3, C3, Bb2, A2, G2, F2, E2, D2, C2. The chords above the notes are: Cm7, F7, Bb, Bbm, F, Dm7, Gm7, C7, CAUG7, F.

ASSIGNMENT

1. Write out chord scales on each of the following notes as shown in Ex. No. 23.

C, Db, D, Eb, E, F, Gb, G, Ab, A, Bb, B

Ex. 23

Example 23 consists of two staves of music. The first staff has a treble clef and a key signature of one flat (Bb). The notes are: Bb4, A4, G4, F4, E4, D4, C4, Bb3, A3, G3, F3, E3, D3, C3. The second staff has a bass clef and a key signature of one flat (Bb). The notes are: Bb3, A3, G3, F3, E3, D3, C3, Bb2, A2, G2, F2, E2, D2, C2. A chord symbol Bb is written above the first staff.

(b)

Bb m

(c)

Bb 7

(d)

Bb m7

(e)

Bb aug7

(f)

Bb dim7

2. *Answered*
In the event that you do have access to a piano, it is definitely advisable to spend some time playing and listening to the chord scales discussed in this lesson. The most effective way is to sustain the closed chord in the left hand while playing the altered scale in the right. Remember that speed is not essential, but attentive listening is.

(Play all chord scales notated in Problem No. 1)

3. Using only chord notes, chromatic approach notes and scalewise approach notes, compose original improvisations based on each of the following chord progressions:

*can now chord
now approach*

(a)

Chord progression (a): G, Em7, Am7, D7, G, Fm7, Bb7, Eb, Am7, D7, G, Ab, Am7, D7.

(b)

Chord progression (b): Fm7, Bb7, Eb, Gbo, Fm7, Bb7, Eb, Db7, C7.

(c)

Chord progression (c): D7, Dm7, G7, C, Dm7, C, Ebo, Dm7, G7, Em7(b5), A7, Dm7, G7, C.

(d)

Chord progression (d): Db, Bbm7, Ebm7, Ab7, Db, Bbm7, Ebm7, Ab7, Am7, D7, G, Ebm7, Ab7, Db.

(e)

Chord progression (e): Am7, D7, G, Fbm7(b5), B7, Em, Bbm7, Eb7, Ab, Am7, D7, G.

4. Using each of the following chord progressions as a guide, set up a four stave score as illustrated in Example No. 24.

original melody
using chord notes
and chromatic and
scalewise approach
notes

EX. 24

harmonic,
continuity

root tone
of chord

1

E^b Fm^7 E^b Fm^7 E^b Fm^7 E^b

Am^7 D^7 Gm^7 C^7 Fm^7 B^b7 E^b

(c)

F $F^{\#o}$ Gm^7 C^7 F $FAUG^7$ B^b B^b_m

F E^b7 D^7 G^7 Gm^7 C^7 F

ETANA NH YH

5. Write a four-part harmonization of each of the following melodies:

(a)

G B^bo Am^7 A^b7 G B^bo Am^7 D^7

Dm E^7 E^b7 E^7 Am^7 A^b_m Am^7 Cm G B^bo Am^7 D^7 G

b)

F A^bo Gm^7 E^o F A^bo

Gm^7 C^7 $Am^7(b5)$ D^7 Gm^7 C^7 F

6. Write a four-part harmonization in open position of each of the following melodies:

(a)

(b)

His Tripe pour 2 standards notes notes are - chord notes
 non-chord note approach
 scale wise approach
 chromatic approach

LESSON NO. 6

A. IMPROVISATION (cont.)

In Lesson #5 we covered some of the melodic elements to be considered in improvising. We continue now with some melodic figurations that may be effectively used.

1. DELAYED RESOLUTION

In this type of figuration, the chord note is approached from both above and below before resolution occurs. The delayed resolution may take either of the following forms:

a. approach note

approach note

approach note

approach note

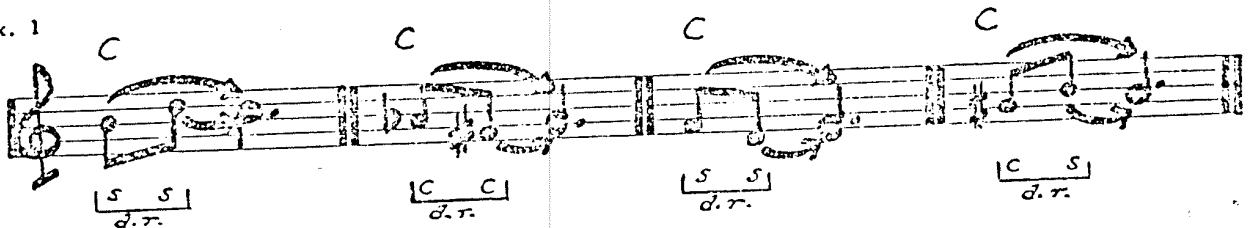
chord note

chord note

b.

Following are some typical examples of delayed resolutions.

Ex. 1



2. DOUBLE CHROMATIC APPROACH

As indicated by the title, this melodic figuration consists of two chromatic notes moving in the same direction into the chord tone. The double chromatic approach almost always assumes one of the following forms:

Εξά Σὺς ὑπὸ τὴν πλὴν τῶν ὑποφθόγων πρὸς τὴν ἀνὰ πρῶτον ὡς ἀνὰ τὸν ὅλον

Ex. 2

(a) 1 chrom - chrom b3

(b) b3 chrom - chrom 1

(c) 3 chrom - chrom 5

(d) 5 chrom - chrom 3

(e) 5 chrom - chrom b7

(f) b7 chrom - chrom 5

See A 'd.c.' requires Before going after chord note, it only works as b3 interval

Following is an example of an original melody created from a given chord progression using all of the techniques of melodic improvisation that have been discussed in Lessons V and VI. Each note used has been coded as follows:-

Chord Notes..... |
 Chromatic Approach Notes..... c
 Scalewise Approach Notes..... s
 Delayed Resolution..... d.r.
 Double Chromatic Approach..... d.c.

Ex. 3

C Am7 Dm7 G7 C C7 F Fm

C C#o Dm7 Db7 C Bb7 C

There are, of course, endless melodic variations that could be developed from this same series of chords. Following is another melody based on the chord progression given in Ex. #3.

Ex. 4

Example 4 shows two staves of music in 4/4 time. The first staff features a melody with the following chords: C, Am7, Dm7, G7, C, C7, F, and Fm. The second staff features a melody with the following chords: C, C#o, Dm7, Db7, C, Bb7, and C. Below the notes are rhythmic markings: 's' for quarter notes and 'c' for eighth notes. The second staff also has 'd. r.' and 'd. c.' markings under some notes.

B. IMPROVISATION ON A GIVEN MELODY

The preceding has dealt with the construction of an original melody from a given chord progression. These same principles are in continual use by the instrumentalist or arranger. He has, however, the additional problem of writing a melodic variation (improvisation) on an already established melody.

In improvising on a given tune, it is normally advisable that the original melody be recognizable. The type of band or combo for which you happen to be playing or writing should be your guide in determining just how far from the original melody you dare to go.

All of the melodic techniques discussed in Lessons V and VI (i.e., Chord Notes, Chromatic Approach Notes, Scalewise Approach Notes, Delayed Resolutions, Double Chromatic Approaches) may be applied to a given melody. Of course, in order that the original melody remain recognizable, notes of the original melody should be retained, especially those notes which are important in feeling or duration.

Notice in the following examples that the characteristics of the original melody (a), have been kept in each of the improvisations (b). In addition to the coding described previously, notes of the original melody will now be indicated by "M".

Note: Quarter notes which occur on the first or third beat should not normally be harmonized as approach notes.

Ex. 5

(a) original melody

Chord progression: F Dm7 Gm7 C7 F Eb7 F

(b) improvisation

Chord progression: F Dm7 Gm7 C7 F Eb7 F

M M s M s M M M c M M M M M M i M M a. r. M

Ex. 6

(a) original melody

Chord progression: C Bb7 A7 Fm G7 C

(b) improvisation

Chord progression: C Bb7 A7 Fm G7 C

M i M s M M c M M M M s M M c M M

Ex. 7

(a) original melody

Chord progression: G Am7 D7 G Cm G

(b) improvisation

Chord progression: G Am7 D7 G Cm G

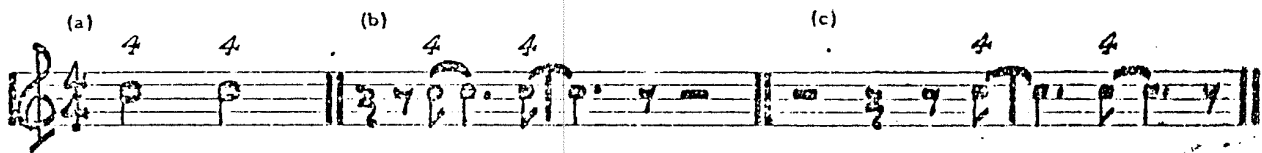
M s. c. M c M M M M c M M s M s M M

C. RHYTHM (cont.)

Any rhythmic pattern may assume a number of different forms and feelings depending upon its relative location in the bar. To illustrate, the simple rhythm "4 plus 4" might be used in any of the following ways:

(NOTE: One equals eighth note.)

Ex. 8



To develop an understanding and awareness of the various forms which may be evolved from any rhythm pattern, we use the technique of "rhythmic displacement".

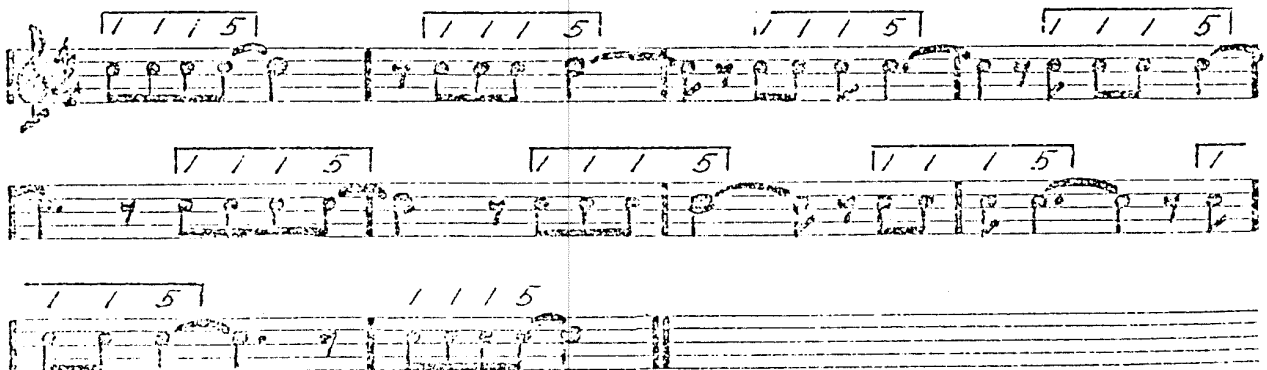
1. RHYTHMIC DISPLACEMENT PHONETIC METAMORPHOSIS

a. Displacement by 1/8

In the following example, the pre-selected rhythmic pattern will be repeated eight times, but before each repetition an eighth rest will be inserted. As a result of this, the rhythm which begins on the first beat of the first bar will begin on the second beat of the next bar, the third beat of the following bar, etc., until the original rhythm pattern has been displaced one full bar.

Ex. 9

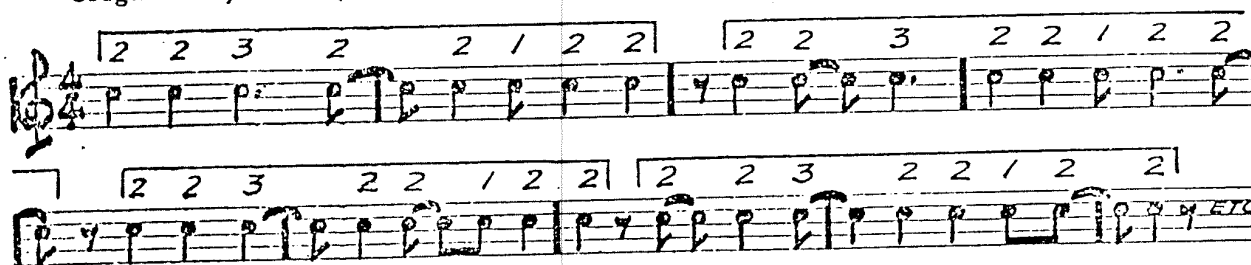
original rhythm "1, 1, 1, 5"



It is, of course, possible to apply this same technique to rhythmic patterns which encompass any number of beats. In Example 10, a two bar (sixteen eighth beats) rhythm pattern has been displaced by $1/8$ rest until it returns to its original form.

Ex. 10

original rhythm "2, 2, 3, 2, 2, 1, 2, 2,"



b. Displacement by $3/8$

The technique of rhythmic displacement remains the same except that a rest of $3/8$ beats is inserted before repeating the rhythm pattern.

(NOTE: In working with rests, be sure to use the same type of bar-subdivision that you would in working with notes.)

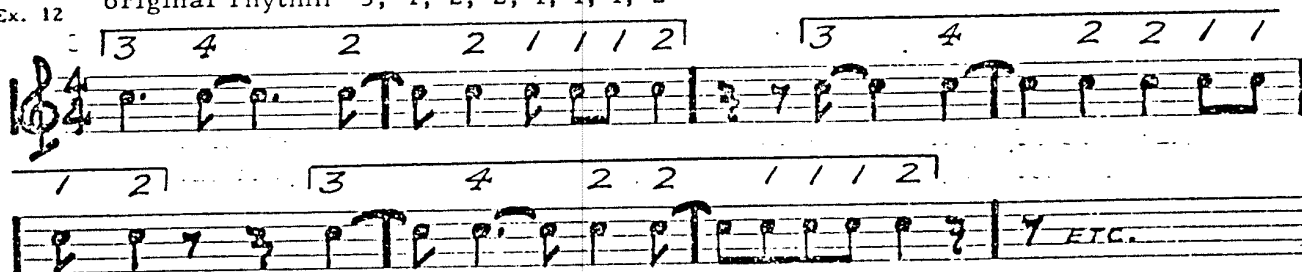
Ex. 11

original rhythm "2, 1, 1, 1, 3"



Next, a two bar rhythmic pattern displaced by $3/8$.

Ex. 12 original rhythm "3, 4, 2, 2, 1, 1, 1, 2"



The value of rhythmic exercises of this sort can not be stressed too strongly. Completion of the assigned problems will familiarize you with the type of rhythm which is an essential part of modern music and jazz.

2. NOTES REGARDING THE USE OF TRIPLETS IN 4/4 TIME

- Quarter note triplets may begin only on the first or third beats of the bar.

Ex. 13



- Eighth note triplets may begin on the first, second, third or fourth beats of the bar only.

Ex. 14

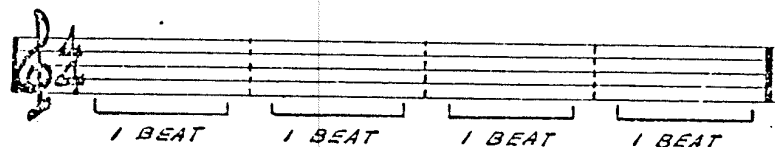


3. NOTATION OF DOUBLE-TIME RHYTHMS

Double-time (i.e., the feeling of eight pulsations to the bar in 4/4 time) rhythms may be notated properly by observing the following:

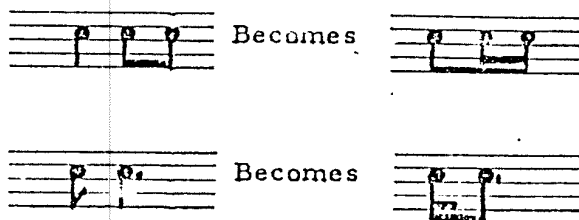
- Consider four sub-divisions to the bar instead of the customary two.

Ex. 15



- b. Reduce each value of the original 4/4 rhythmic pattern by one-half, i.e., quarter note becomes an eighth note; dotted half becomes a dotted quarter; two bars become one bar, etc.
- c. Beam each group of notes that occupy one-quarter beat of double-time (i.e., two beats of regular 4/4 time).

Ex. 16



Following are several examples of rhythmic phrases (a) as they appear in 4/4 time; and (b) as they would be notated if a "double-time" feeling were desired.

Ex. 17

(a) original rhythm

double-time notation

(b) original rhythm

double-time notation

Ex. 17 consists of two parts, (a) and (b). Each part shows a musical staff with an "original rhythm" and a "double-time notation" below it. In the original rhythm, the notes are spaced out to fit 4/4 time. In the double-time notation, the notes are compressed to fit a 2/2 time signature, with beams and slurs indicating the grouping of notes. Vertical dashed lines connect corresponding notes between the original and double-time staves.

NOTE: Double-time is used exclusively in slow and medium-slow tempos.

ASSIGNMENT

1. Given are some chord progressions. (Ex. 19)
 - (a) Write harmonic continuities based on these progressions.
 - (b) Improvise original melodies on the chord progressions. Remember that there must be an explanation for each and every note used. (See Ex. 3 and 4).
 - (c) Code each note similar to Examples 3 and 4.

Ex. 18

Given chord progression

Improvised melody

Harmonic continuity

The musical notation for Example 18 is organized into three horizontal staves. The top staff, labeled 'Given chord progression', shows a sequence of five chords: C, C7, F, Fm, and C. Each chord is represented by a single note on a five-line staff. The middle staff, labeled 'Improvised melody', shows a melody line with notes and rests. Below the melody line, there are two lines of text: 'c' and 'a. c.'. The bottom staff, labeled 'Harmonic continuity', shows a piano accompaniment with chords and single notes in both the right and left hands.

Ex. 19

(a)

C F#m7 B7 Em7 A7 Dm7 G7

C D7 Dm7 Db7 C

(b)

E^b B^bm7 E^b7 A^b A^bm

E^b G^b7 Fm7 B^b7 E^b D^b7 E^b

(c)

G A^b° Am7 D7 G G7 C Cm

G E^b7 Am7 D7 G F7 G

(d)

B^bm7 E^b7 A^b A°

B^bm7 A7 A^b D^bm A^b

(e)

F Gm7 C7 F A^m7(b5) D7

Gm7 B^bm F C7 F

2. Given are some original melodies with chord symbols. (Ex. 21)

- (a) Write harmonic continuities in open position based on the chord progressions.
- (b) Write an improvised variation of each of these melodies. (IMPORTANT: --ORIGINAL MELODY MUST BE RECOGNIZABLE).
- (c) Code each note as in Example 5b.

Ex. 20

Given chord progression

Given original melody

Improved melody

Harmonic continuity

Chord progression: C C7 F Fm C

Ex. 21

(a) Chord progression: Gm7 C7 F Abo Gm7 C7 Am7(b5) D7

(b) Chord progression: Fm7 Bb7 Eb Gm7 Gbm7

(c)

G A^bo Am⁷ D⁷ G A^bo Am⁷ D⁷

G G⁷ C Cm G D⁷ G

C Dm⁷ G⁷ C C⁷ F Fm

C Em⁷ E^bm⁷ Dm⁷ D^b7 C

A^b B^o B^bm⁷ E^b7 A^b Cm⁷(b5) F⁷

B^bm⁷ B^bm⁷ E^b7 A^b

3. Displace each of the following rhythmic patterns by 1/8. Continue until the pattern returns to its original form.

Ex. 22

(a)


2 1 3 2


(b)

2 1 3 1 2 1 1 2 3

4. Displace each of the following rhythmic patterns by $3/8$. Continue until the pattern returns to its original form.

Ex. 23

(a) 

(b) 

5. Convert each of the rhythmic continuities resulting from Problem No. 3 to double-time. Remember that each of the phrases will be reduced to half as many bars as the original.

LESSON NO. 7

MODERN BLOCK HARMONIZATION

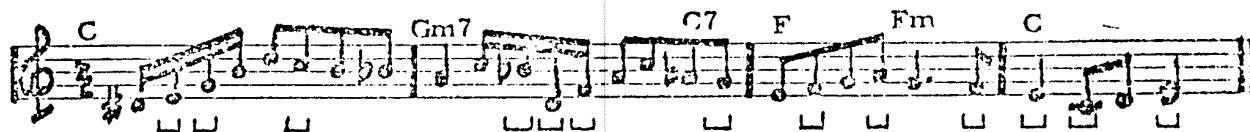
A. MELODIC ANALYSIS

Before attempting to harmonize a melodic line in the manner to be discussed, it is important to understand the function of each note of the melody.

We may start by assuming that every note of a melody must fall into one of the following classifications.

- (1) CHORD NOTES i.e., notes belonging to the chord indicated above the melodic line.

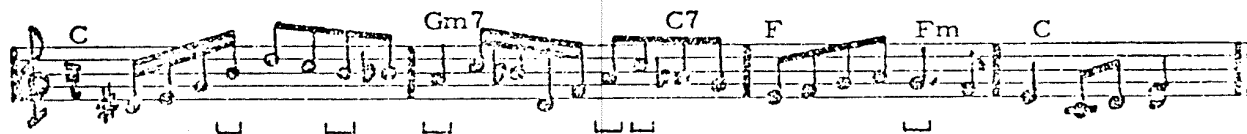
Ex. 1 Chord notes



- (2) NON-CHORD, NON-APPROACH NOTES i.e., non-chord notes which do not function as approach notes.

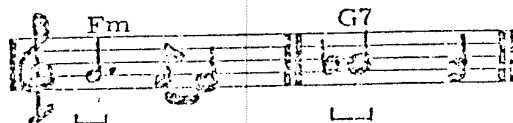
Notes that do not function as approach notes. Notes that do not function as approach notes.

Ex. 2 Non-chord, non-approach notes



NOTE: Since one of the conditions relating to approach notes stipulates that they must be of short duration, we may assume that any non-chord note more than one quarter beat in duration would automatically fall into this classification.

Ex. 3 Non-chord, non-approach notes



Notes are subject to interpretation of improviser

3. SCALE-WISE. APPROACH NOTES (Ref. Lesson No. 5)

Ex. 4 Scale-wise approach notes

Chromatic approach

4. CHROMATIC APPROACH NOTES ... (Ref. Lesson No. 5)

Ex. 5 Chromatic approach notes

NOTE: In addition to the regular chromatic approaches discussed in Lesson No. 5, notes that are classified as non-chord, non-approach may also be approached chromatically.

Ex. 6

In the following example, each note of the given melody has been appropriately coded as follows:

CHORD NOTES	
NON-CHORD, NON-APPROACH NOTES	n.c.
SCALEWISE APPROACH NOTES	s
CHROMATIC APPROACH NOTES	c

Ex. 7

LESSON NO. 4

NOTE: In certain instances more than one possibility for analysis exists. In these cases the most desirable choice has been noted. Where an approach note may be classified as either scale-wise or chromatic, it is usually (but not always) advisable to treat it as a scalewise approach.

As you complete the block harmonization of the assigned melodies, it is advisable that you play each of the possible harmonizations wherever a choice exists so that you may select the one that sounds best to you.

(At this point complete problems No. 1 and No. 2 of the assignment) -

B. MODERN BLOCK HARMONIZATION

Once each note of the melodic line has been properly analyzed, the actual harmonization becomes a relatively simple procedure.

1. **CHORD NOTES....** Harmonize chord notes with designated chord. (as in four-part harmonization - Ref. Lesson No. 4)

ones as four-part

Ex. 8

2. **NON-CHORD, NON-APPROACH NOTES** Harmonize non-chord, non-approach notes with chord, omitting the nearest chord note just below the lead.

Ex. 9

ones as four-part

I III bV VII
D F Ab B D.

- Ex. 10

4. CHROMATIC APPROACH NOTES Harmonize chromatic approach notes chromatically in all voices. (Each note moves chromatically in the same direction into its adjacent chord note.) B. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 8

ly in the same direction ^{was}

Взгляните на карту и вы увидите, что
Тяжелые воды были
были в прошлом

Ex. 11

The completed harmonization would appear as follows:

Ex. 12

C

Following is an illustration of the modern block harmonization of a given melody. In Example 13 the analysis has been made and each note coded, and in Example No. 14 the harmonization is actually completed.

Ex. 13 Melodic analysis

Example 13 shows the melodic analysis of a piece. The first staff contains the following chords and codes: F (S), Gm7 (S), C7 (S), F (3) (NC), Eb7 (NC), D7 (C), C (C), C (C). The second staff contains: Gm7 (S), C7 (NC), F (C), Ab° (S), Gm7 (C), Gb7 (NC), F (NC).

Ex. 14 Modern block harmonization

Example 14 shows the modern block harmonization of the same melody. The first staff contains the following chords and block harmonization: F, Gm7 C7, F (3), Eb7, D7. The second staff contains: Gm7 C7, F, Ab°, Gm7 Gb7, F.

REMINDER: Quarter notes which occur on the first or third beat should not normally be harmonized as approach notes. It is important that the chord sound be heard on these strong beats, when the attack lasts for a full beat or more.

Just to be certain that the foregoing is perfectly clear, here is another example employing the techniques described in this lesson.

Ex. 15 Melodic analysis

#

D7 G Bb° Am7 D7 G (S) E7

Am7 (S?) Ab7 Gmaj7 G Gmaj7

| s | | s | nc c | c | | nc c | | s | s | c | | | c |

| c | c | | | nc | | nc c nc c | s | | |

ASSIGNMENT

1. Analyze and code each of the following melodies.
(See Example No. 7)

(a)

Chords: C, Eb°, Dm7, G7, C, Gm7, C7

Bass line chords: F, Fm, C, Eb°, Dm7, G7, C

(b)

Chords: C7, F, Ab°, Gm7, E°, F, Ab°, Am7(b5), D7

Bass line chords: Gm7, Bbm, F, Ab°, Gm7, Gb7, Fmaj7

(c)

Chords: Fm7, Bb7, Eb, C7

Bass line chords: Fm7, Bb7, Eb, Bb aug7, Eb

(d)

Chords: D7, G, Bb°, Am7, D7, G, Dm, E7

Bass line chords: Am7, D7, Bm7, Bbm7, Am7, Ab7, G

(e)

Bb Gm7 Cm7 F7 Bb Gm7 Cm7 F7

Dm7(b5) G7 Cm7 F7 Bb

(f)

Ebm7 Ab7 Db D° Ebm7 Ab7 Fm7(b5) Bb7

Ebm7 Ab7 Db Bbaug7 Ebm7 Abaug7 Db

2. In a similar manner, analyze and code any three standard tunes of your choice.
3. Write a modern block harmonization of each of the melodies given in Problem No. 1.
4. Write a modern block harmonization of each of the standard tunes analyzed in Problem No. 2.

LESSON NO. 8

A. RHYTHMIC ANTICIPATION

In Lesson No. 4 we discussed those factors which tend to produce a feeling of swing and also the methods of notating these swing rhythms correctly. In this lesson we cover "rhythmic anticipation", a technique whereby we may take any simple tune and alter it rhythmically so that it "swings".

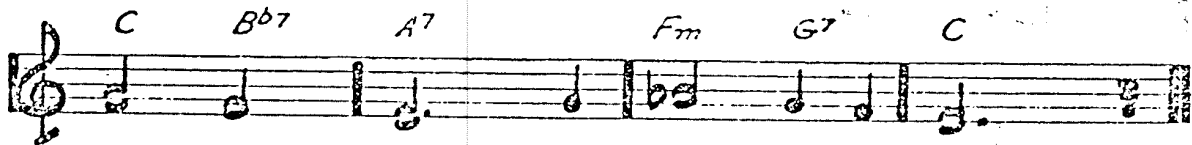
The rule for using rhythmic anticipation is as follows:

NOTES ON THE BEAT MAY BE ANTICIPATED
BY ATTACKING THEM AN EIGHTH BEAT
SOONER THAN THEY ORIGINALLY OCCUR.

In each case, the eighth beat duration is taken from the value of the preceding note.

Ex. 1

(a) original melody



(b) with rhythmic anticipation
(anticipation is indicated by >)

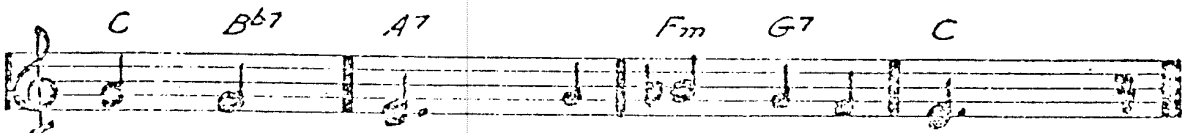


NOTE: Although in the preceding example, rhythmic anticipation has been used wherever possible; in actual usage, anticipation is most effective when alternated with occasional "on-the-beat" attacks. (see Ex. 2b)

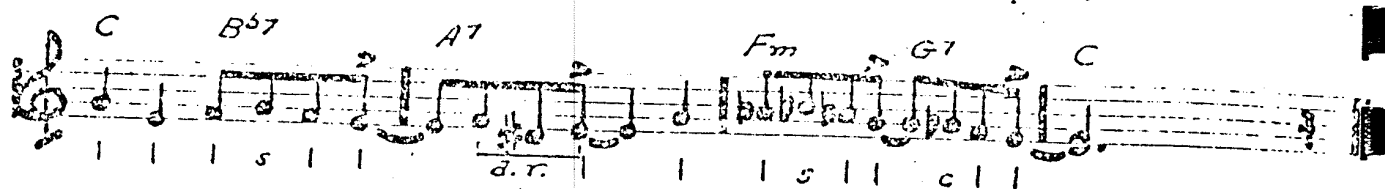
Following is an improvisation of the melody given in Ex. 1 utilizing rhythmic anticipation to produce swing feeling.

Ex. 2

(a) Original melody



(b) Improvised melody using rhythmic anticipation



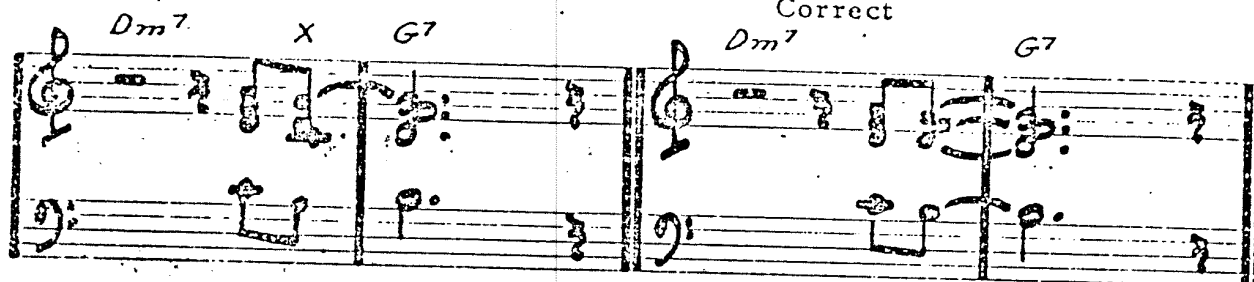
B. MODERN BLOCK HARMONIZATION (Cont'd)

1. HARMONIZATION OF RHYTHMIC ANTICIPATION

When working out the block harmonization of a note that has been rhythmically anticipated, be sure to anticipate the harmony as well as the melody.

Ex. 3

(a) Incorrect

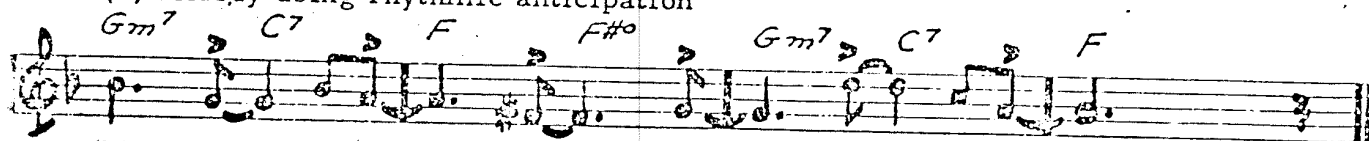


Correct

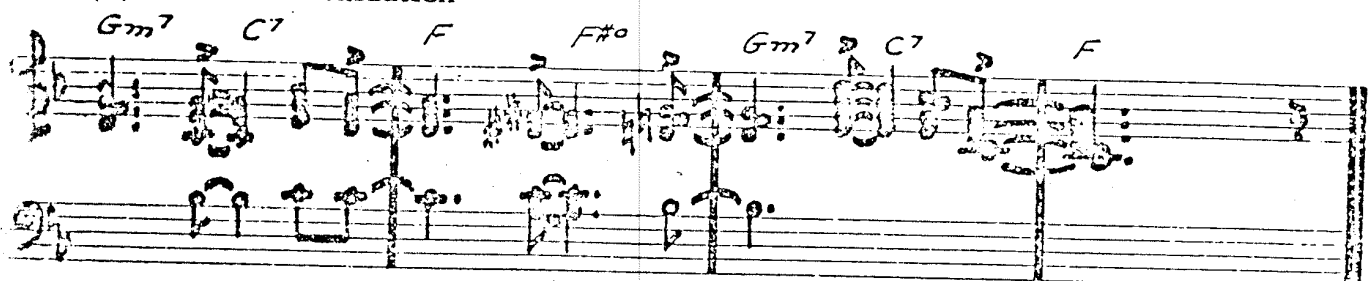


Ex. 4

(a) Melody using rhythmic anticipation



(b) Block harmonization



Notice in the preceding examples that the chord symbols still appear over the first or third beats of the bar even though the melody and the block harmony have been anticipated.

2. HARMONIZATION OF THE DOUBLE-CHROMATIC APPROACH (See Lesson 6.)

Harmonize each of the chromatic approaches so that all voices move chromatically into the following chord.

(Chromatic approach → chromatic approach → chord)

On the 4th you have the chromatic approach

(a) Ex. 5

(b)

3. HARMONIZATION OF THE DELAYED RESOLVE (See Lesson 6)

Harmonize each approach note of the delayed resolve as though the other approach did not exist.

APPROACH

APPROACH

CHORD NOTE

Ex. 6

(a)

(b)

(Ex. 6 cont'd next page)

The first system of handwritten musical notation for 'The Bird Song'. It consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The key signature has one sharp (F#) and the time signature is 3/4. The melody in the upper staff begins with a quarter note on G4, followed by an eighth note on A4, a quarter note on B4, and a half note on C5. The lower staff provides accompaniment with a quarter note on G2, a quarter note on B2, and a half note on D3.

Handwritten musical notation for Example 1. The treble staff contains a quarter rest, followed by a quarter note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The bass staff contains a quarter rest, followed by a quarter note G3, a quarter note A3, a quarter note B3, and a quarter note C4. A slur connects the G4, A4, and B4 notes in the treble staff. A slur connects the G3, A3, and B3 notes in the bass staff. A slur connects the C5 note in the treble staff and the C4 note in the bass staff.

The following principles relating to the dominant seventh chord may be effectively used in modern block harmonization.



(a)

(d)

Handwritten musical notation for exercise (d) in G major, 2/4 time. The key signature has one sharp (F#). The melody in the treble clef starts on G4, moves to A4, B4, C5, then back to G4, A4, B4, C5. The bass line starts on G3, moves to A3, B3, C4, then back to G3, A3, B3, C4. The piece ends with a double bar line.

Handwritten musical notation for the song "I'm a Pouter". The notation is on a grand staff (treble and bass clefs). The melody is written in the treble clef, and the bass line is in the bass clef. The key signature has one flat (B-flat). The tempo is marked "Allegretto". The lyrics are written below the melody. There are handwritten notes and markings on the score, including "G7 C7" above the first measure, "F" above the second measure, and "I IN ME-LODY NO SUBST. POSSIBLE" written vertically in the middle of the first measure. There are also handwritten numbers "9" and "9.1" near the first measure.

b. Where a dominant seventh chord immediately precedes the tonic (i.e., V7 to I), the ninth may be lowered one half step in the dominant seventh chord. b9

Ex. 8

V7 C7 I

c. With "one" in the lead of the V7 chord, the following alternate voicing may be used:

Following is a reference chart showing the V7 to I cadence in every key. A detailed discussion of harmonic progression including all forms of cadence will be presented later in the course.

"V7 to I" CADENCE CHART

<u>V7</u>	<u>I</u>	<u>V7</u>	<u>I</u>	<u>V7</u>	<u>I</u>	<u>V7</u>	<u>I</u>
G7...C		Bb7...Eb		Db7...Gb		E7...A	
C7...F		Eb7...Ab		F#7...B		A7...D	
F7...Bb		Ab7...Db		B7...E		D7...G	

Following is an example of modern block harmonization which contains all of the new principles described in this lesson as well as those covered in Lesson No. 7.

Ex. 9

(a) given melody

(Ex. 9 cont'd on following page)

(Modern block harmonization)

(Ex. 9 cont'd)

NOTE: It is important that you study these examples closely, being certain that you understand each and every step in the harmonization procedure. Remember that your relative success or failure in successfully completing the lesson assignments depends upon your understanding of these examples.

C. HARMONIZATION OF IMPROVISED MELODIES

All of the techniques described in Lessons No. 7 and No. 8 apply not only to the harmonization of given standard or popular tunes, but to the harmonization of improvised melodies as well. Here is an example showing the modern block harmonization of an improvised melody. All techniques employed in creating the improvisation have been discussed in Lessons 5 and 6.

Ex. 10

(a) given melody

(Ex. 10 - cont'd next page)

(Ex. 10 - cont'd)

(b) improvisation of given melody and analysis of same.

F *Dm7* *Gm7* *C7* *Gm7* *C7(b9)* *F* *Cm7* *B7*

Bb *Bbm* *F* *D7* *G7* *Gm7* *C7(b9)* *F*

(c) modern block harmonization of improvised melody

F *Dm7* *Gm7* *C7* *Gm7* *C7(b9)* *F* *Cm7* *B7*

Bb *Bbm* *F* *D7* *G7* *Gm7* *C7(b9)* *F*

NOTE: Necessarily, the preceding examples and illustrations have dealt with extreme applications of the special cases relating to improvisation and block harmonization. In actual usage however, the best treatment is very often the simplest, with special cases such as the delayed resolve and the double chromatic approach used only for occasional effect.

Remember, also, that the best block harmonizations are usually a combination of modern block harmonization, and simple four-part harmonization as described in Lesson No. 4.

D. OPEN VOICING OF MODERN BLOCK HARMONIZATION

Open position, as explained in Lesson No. 3, may be effectively used in modern Block harmonization. The technique remains the same, i.e.,

OPEN POSITION MAY BE PRODUCED BY
DROPPING THE SECOND VOICE (FROM
THE TOP) DOWN ONE OCTAVE.

Here is an illustration of modern block harmonization in open position.

Ex. 11

(a) given melody

Musical notation for the given melody in B-flat major, 7/4 time. The melody consists of 14 measures. Above the staff, the following chords are indicated: Bb, C7, Gb7 Cm7, F7(b9), and Bb NAT7. Below the staff, the following notes are indicated: | | d.r. c | n.c. | | n.c. n.c. | c | n.c. n.c. n.c.

(b) block harmonization - closed position

Musical notation for the block harmonization in closed position. The melody is harmonized with chords in the upper register, creating a dense, closed texture. The chords indicated above the staff are Bb, C7, Gb7 Cm7, F7(b9), and Bb NAT7.

(c) block harmonization - open position

Musical notation for the block harmonization in open position. The melody is harmonized with chords in the lower register, creating a more open texture. The chords indicated above the staff are Bb, C7, Gb7 Cm7, F7(b9), and Bb NAT7.

ASSIGNMENT

1. Write a modern block harmonization to each of the following melodies. Be sure to treat all rhythmic anticipations as illustrated in Example #3.

(a)

Chords for (a): G7, C, C#o, Dm7, G7, C, C#o, Dm7, G7, C, Eb, Dm7, G7, C, Bb7, C.

(b)

Chords for (b): F, Dm7, Gm7, C7, Gm7, C7, Am7(13) D7, Gm7, C7, F, Bb, F.

(c)

Chords for (c): Eb, Fm7, Bb7, Eb, F7, Fm7, Bb7, Eb, E7, Eb.

(d)

Chords for (d): C, Eb, Dm7, G7, C, Eb, Dm7, GAUG7, C, Eb, Dm7, Db7, C.

2. Using the techniques described in Lessons No. 5 and No. 6, write an improvised variation of each of the following melodies. Use "rhythmic anticipation" to produce a swing feeling in each of the improvisations.

a)

Chords: G, E_m^7 , A_m^7 , D^7 , A_m^7 , D^7 , $B_m^7(b5) E^7$, A_m^7 , D^7 , G, B^b_9 , A_m^7 , D^7 , G

b)

Chords: C_m^7 , F^7 , B^b , B^b , C_m^7 , F^7 , $D_m^7(b5) G^7$, C_m^7 , F^7 , B^b , G_m^7 , C_m^7 , F^7 , B^b

c)

Chords: G^7 , G_m^7 , C^7 , F, A_m^7 , $A^b_m^7$, G_m^7 , C^7 , F, $B^b_m^7$, F

d)

Chords: A^b , $A^b_m^7$, D^b_7 , G^b , A_m^7 , D^7 , G, $B^b_m^7$, E^b_7 , A^b

3. Complete a modern block harmonization of each of the improvised melodies created in Problem No. 2.

4. Using any standard or popular tune of your choice, complete the following problem:

a. Write an improvised variation of the original melody.
(Original melody must be recognizable.)

b. Complete a modern block harmonization of the improvised melody.

Standard
IMP
MB

5. Once again, using any given tune as a starting point complete the following problem:

a. Write an improvised variation of the original melody. Improvise as little or as much as you please, but in any event, the original melody must be identifiable.

b. Complete a modern block harmonization of the improvised melody in open position.

Standard
IMP
MB

LESSON NO. 9

A. TENSIONS

In this lesson we begin our discussion of "tensions", i.e., high-degree chordal functions. These high-degree chordal functions are treated, for our purposes, just the same as chord notes, and have the same properties as those regular low-degree chord notes already discussed.

It is also interesting to note, at this time, that all of the so-called "non-chord, non-approach notes" which we encountered in modern block harmonization, are in reality high-degree chordal functions. (i.e., tensions).

Locating these tensions may be simplified by recognizing that every high-degree chord note is located one whole step above a related low-degree chord note.

Following is a listing of practical tensions. In each case the related low-degree chord note has been indicated.

Ex. 1 MAJOR: tensions are 7 ; 9

whole step whole step

1 3 5 6 7 1 9

4th missing

Ex. 2 MINOR: tensions are 7 ; 9

whole step whole step

1 b3 5 6 7 1 9

4th is missing

DOMINANT 7th: tensions are 9 ; raised 11 ; 13

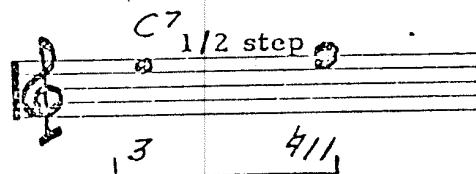
whole step whole step whole step

1 3 5 b7 1 9 3 #11 5 13

4th missing

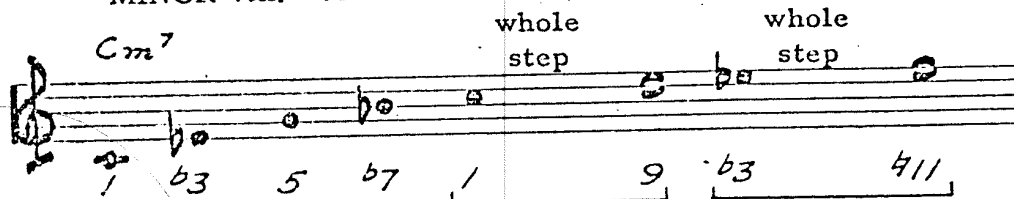
NOTE: The scale eleventh (located one-half step above the third) is also quite commonly used with the Dominant 7th chord. There are specific instances where this scale eleventh is more effective than the raised eleventh and vice-versa. For the time being, experiment with both, and let your taste govern your choice.

Ex. 4 DOMINANT 7th: scale 11



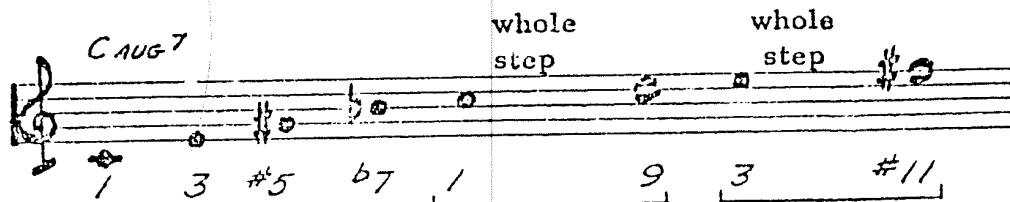
Ex. 5

MINOR 7th: tensions are 9 ; scale 11



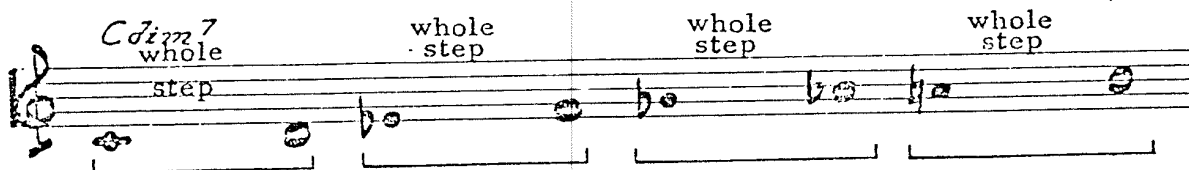
Ex. 6

AUGMENTED 7th: tensions are 9 ; raised 11



Ex. 7

DIMINISHED 7th: tensions are one whole step above every low degree chord note



(At this point it would be advisable to complete Problem No. 1 of the lesson assignment.)

As previously noted, we can now specifically identify those notes which formerly had been classified simply as "non-chord, non-approach". In the analysis of the following melody, this general classification has been eliminated, and each of the tensions specifically named. Notice that this does not in any way affect the identification of those notes of the melody which could be treated as approach notes.

chord notes |

tensions by name

scalewise approach notes s

chromatic approach notes c

8

Gm7 C7 Fm7 Ab Gm7 C7 Am7(b5) D7

9 11 13 9 9 9 (Hi) c | | 11 13 | |

Gm7 C7 Am7(b5) D7 Gm7 Gb7 F

| 11 13 | | c c | 9 c 9 | c 9

B. BLOCK HARMONIZATION OF TENSIONS

Those notes which we now call tensions are still harmonized the same as they were when classified as non-chord, non-approach, i.e., omit the related low degree chord note just below the lead.

The following table may be used in checking the harmonization of any tension.

Ex. 9

Major:

7

9

9

Minor:

Δ7

9

9

(8)

(1)

5

6

b3

5

1

b3

Δ7 chord

(ex. 9 cont'd)

Dom. 7th:	9	11	13	Aug. 7th:	9	#11	Min. 7th:	9	11
omitted	(1)	(3)	(5)	omitted	(1)	(3)		(1)	(3)
b7	9*	3		b7	9		b7	1	
5	b7	9*		#5	b7		5	b7	
3	5	b7		3	#5		b3	5	

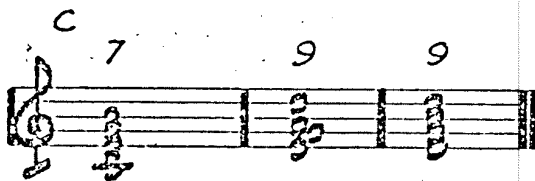
* 9 for 1 substitution in Dom. 7th chord.

Dim. 7th: Omit related low-degree chord note

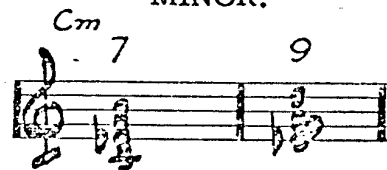
Ex. 9 in musical notation would appear as follows:

Ex. 10

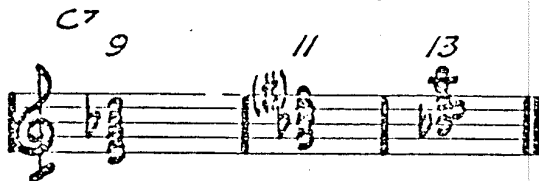
MAJOR:



MINOR:



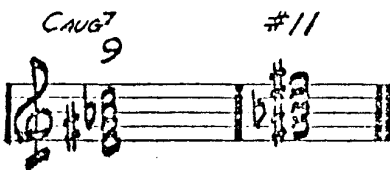
DOM. 7th:



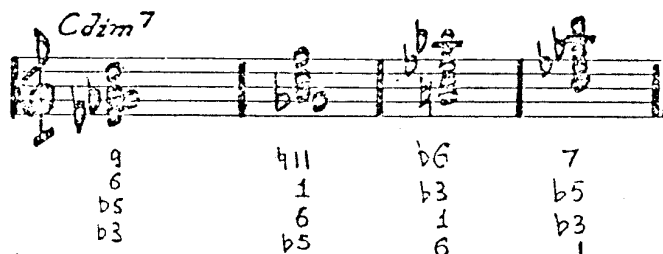
MINOR 7th:



AUG. 7th:



DIM. 7th:



Here is a modern block harmonization of the given melody analyzed in Ex. 8.

Ex. 11

Chord progression for Ex. 11:

- Measure 1: Gm^7
- Measure 2: C^7
- Measure 3: $F\#A^7$
- Measure 4: A^{bo}
- Measure 5: Gm^7
- Measure 6: C^7
- Measure 7: $Am^7(b5)$
- Measure 8: D^7
- Measure 9: Gm^7
- Measure 10: C^7
- Measure 11: $Am^7(b5)$
- Measure 12: D^7
- Measure 13: Gm^7
- Measure 14: G^b7
- Measure 15: F

C. TENSION-RESOLVE (HI-LO)

Although they do not always do so, there is a strong tendency for every tension to resolve to the related low degree chord note found one whole step below. Technically this is known as "tension-resolve", or more simply "hi-lo", (i.e., "hi" degree resolving to "lo" degree.)

Following is an illustration showing all of the possibilities for hi-lo with each of the basic chord structures.

Ex. 12

MAJOR: 7 to 6 ; 9 to 1

Chord: C

Notes: 7, 6, 9, 1

Ex. 13

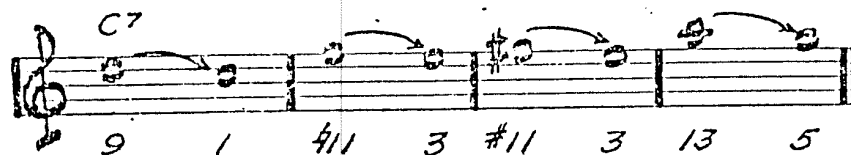
MINOR: 7 to 6 ; 9 to 1

Chord: Cm

Notes: 7, 6, 9, 1

Ex. 14

DOMINANT 7th: 9 to 1 ; 11 (scale or raised) to 3 ; 13 to 5



Ex. 15

MINOR 7th:

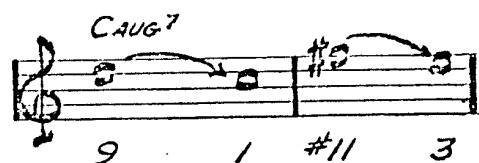
9 to 1 ; scale 11 to 3



Ex. 16

AUGMENTED 7th:

9 to 1 ; raised 11 to 3



Ex. 17

DIMINISHED 7th: one whole step above any chord note resolving down to the related low degree chord note.



Here is an example showing how an original theme might be composed using only hi-lo. The resulting sound should give you some idea of the value of having a good working knowledge of these tension-resolve patterns.

Ex. 18




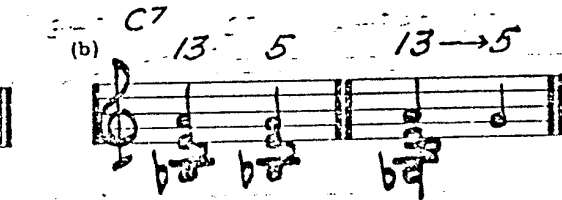
II

D. HARMONIZATION OF HI-LO

Since the harmonization of both the tension and its related low-degree call for the same lower voices, any hi-lo may be harmonized by simply sustaining the three lower voices while the lead moves.

Ex. 19

(a) 

(b) 

The following table may be used in checking the harmonization of any tension-resolve pattern.

Ex. 20

MAJOR	7 - 6	9 - 1	
	5	6	
	3	5	
	1	3	
MINOR:	7 - 6	9 - 1	
	5	6	
	b3	5	
	1	b3	
DOM. 7th:	9 - 1	11 - 3	13 - 5
	b7	9	3
	5	b7	9
	3	5	b7
MIN. 7th:	9 - 1	11 - b3	
	b7	1	
	5	b7	
	13	5	

AUG. 7th: 9 - 1 #11 - 3

b7 9
#5 b7
3 #5

DIM. 7th: 9 - 1

bb7
b5
b3

4|| - b3
etc. 6 b5
b6 - b5
b3 1 6
7 - 6
b5
b3
1

To be certain that the foregoing is perfectly clear, here is Ex. 20 in musical notation.

Ex. 21

Ex. 21 consists of five lines of musical notation in treble clef, each with a key signature of one flat (Bb). The notation includes various chords and fingerings:

- Line 1: C 7 - 6 9 - 1 and Cm 7 - 6 9 - 1
- Line 2: C7 9 - 1 11 - 3 #11 - 3 13 - 5
- Line 3: Cm7 9 - 1 4|| - b3 and CAUG7 9 - 1 #11 - 3
- Line 4: Cdim7
- Line 5: Fingerings for the chords above: 9 - 1, 4|| - b3, b6 - b5, 7 - 6, b5, b3, 1, b5, b3, 1, 6

Utilizing the foregoing principles, the harmonization of Ex. 18 would appear as follows:

Ex. 22

Ex. 22 shows two systems of musical notation. The first system consists of four measures with the following chords and intervals: C (9-1, 7-6), Gm7 (11-3), C7 (13-5), and F (9-1, 7-6). The second system consists of four measures with the following chords and intervals: C (9-1), Eb (Hi-Lo), Hi-Lo, Dm7 (11-b3), Db7 (13-5), and C (7-6). The notation includes treble and bass staves with notes and accidentals.

An alternate technique used in the harmonization of tension-resolve is as follows:

Two simultaneous hi-lo's may be used, provided that they are separated by the interval of a third.

This "double hi-lo" would appear as follows:

Ex. 23 shows two examples of double hi-lo. (a) shows a C chord with intervals 9 and 7, and a (b3rd) interval. (b) shows a C7 chord with intervals 13 and 11, and a (b3rd) interval. The notation includes a treble staff with notes and accidentals.

The following illustration would be incorrect, since the hi-lo's are not separated by the interval of a third.

Ex. 24 shows an incorrect double hi-lo. It features a C7 chord with intervals 13 and 9, and a (b3rd) interval. The notation includes a treble staff with notes and accidentals. The word "Incorrect" is written to the right of the notation.

Ex. 25

Harmonization of tension-resolve using "double hi-lo".
(Only practical cases)

MAJOR: 9 - 1
7 - 6

5
3

MINOR: 9 - 1
7 - 6

5
b3

DOM. 7th: 11 - 3 13 - 5
9 - 1 11 - 3

b7 9
5 b7

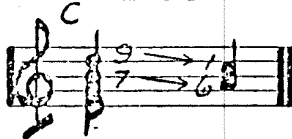
MIN. 7th: 11 - b3
9 - 1

b7
5

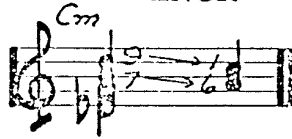
Ex. 25 in musical notation would have the following appearance:

Ex. 26

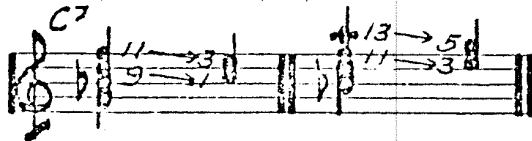
MAJOR



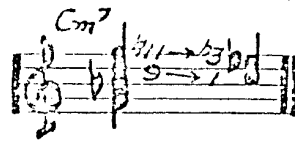
MINOR



DOMINANT 7th



MINOR 7th



Using "double hi-lo" wherever possible, Ex. 18 might be harmonized in the following manner:

Ex. 27

Ex. 27 shows two systems of musical notation. The first system consists of four measures. The chords above the staff are C, Gm7, C7, F, and Bb7. The melody is written in treble clef, and the bass line is in bass clef. The second system also consists of four measures. The chords above the staff are C, Eb, Dm7, Db7, and C. The melody is written in treble clef, and the bass line is in bass clef.

An alternate technique used in the harmonization of Ex. 18 is as follows:

Two approaches can be used to harmonize the melody. The first approach is to use the "double hi-lo" technique, which is the technique used in Ex. 27.

The second approach is to use the "double hi-lo" technique, which is the technique used in Ex. 27.

The third approach is to use the "double hi-lo" technique, which is the technique used in Ex. 27.

ASSIGNMENT

No. 1. Notate tensions of the six basic chord structures, starting on each of the following notes, similar to Example #1 through #7.

C, F, B \flat , E \flat , A \flat , D \flat , G \flat , (F \sharp), B, E, A, D, G

No. 2. Starting on each of the above notes, notate the table showing harmonization of tensions.
(See Examples 9 and 10)

No. 3. Compose original melodies on each of the following chord progressions using "hi-lo" patterns only.
(See Example 18)

No. 4. Again, using the list of root tones from Problem No. 1, notate the table showing harmonization of "hi-lo".

(See Examples 20 and 21)

No. 5. In a similar manner, notate the table showing harmonization of tension-resolve using "double hi-lo". (See Examples 25 and 26)

No. 6. Harmonize each of the melodies composed for Problem No. 4. Use "double hi-lo" only where desired. (See Examples 22 and 27)

No. 7. Analyze each of the following melodies, using the indicated coding. Remember that those notes that appear to be approach notes are still classified as approach notes. All principles of melodic analysis remain the same, except that those functions which were formerly indicated as non-chord, non-approach will now be named as tensions.

chord notes (low degree)	
tensions	by name
hi-lo	by name
scalewise approach notes	s
chromatic approach notes	c
double chromatic approach	d.c.
delayed resolve	d.r.

No. 8. Complete a modern block harmonization of each of the given melodies. (See Ex. 28)

(a)

Exercise (a) consists of two staves of music. The first staff has a treble clef and a key signature of one flat (B-flat). The notes are: C4, E4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. Chords written above are: C, E^bo, Dm⁷, G⁷, C, E^bm⁷, E^bm⁷. The second staff has a bass clef and the same key signature. The notes are: D3, C3, B2, A2, G2, F2, E2, D2, C2, B1, A1, G1. Chords written below are: Dm⁷, B^b7, G⁷, C, D^b7, C.

(b)

Exercise (b) consists of two staves of music. The first staff has a treble clef and a key signature of two flats (B-flat, E-flat). The notes are: B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2. Chords written above are: B^b, Fm⁷, B^b7, E^b, A^b7. The second staff has a bass clef and the same key signature. The notes are: B2, A2, G2, F2, E2, D2, C2, B1, A1, G1, F1, E1. Chords written below are: B^b, Cm⁷, Dm⁷, D^b7, Cm⁷, B7, B^b.

(c)

Exercise (c) consists of two staves of music. The first staff has a treble clef and a key signature of two sharps (F-sharp, C-sharp). The notes are: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Chords written above are: G, B^bo, Am⁷, A^b7, G, B^bo, Am⁷, A^b7. The second staff has a bass clef and the same key signature. The notes are: G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2. Chords written below are: G, E⁷, Am⁷, A^b7, G, F7, G.

Continuation of exercise (c) on two staves. The first staff has a treble clef and a key signature of one sharp (F-sharp). The notes are: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Chords written above are: Gm⁷, G^b7, F, Gm⁷, C⁷, Am⁷(b5), D⁷. The second staff has a bass clef and the same key signature. The notes are: G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2. Chords written below are: Gm⁷, C⁷, F, Dm⁷, Gm⁷, G^b7, F.

(c)

Continuation of exercise (c) on two staves. The first staff has a treble clef and a key signature of one flat (B-flat). The notes are: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Chords written above are: G⁷, C, E^bo, Dm⁷, G⁷, C, E^bo, Dm⁷, G⁷. The second staff has a bass clef and the same key signature. The notes are: G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2. Chords written below are: Gm, A⁷, Dm⁷, D^b7, C, F⁷, C.

PROGRESSIONS FOR PROBLEM NO. 3

LESSON NO. 10

A. VARIATIONS OF HI-LO

In addition to the basic tension-resolve pattern which was discussed in Lesson No. 9, there are several variations of hi-lo that may be effectively used.

1. LO-HI-LO

Ex. 1

(a) C
1 - 9 - 1

(b) D7
5 - 13 - 5

(c) B^bm
6 - 7 - 6

Following is a listing of all of the possible forms of Lo-Hi-Lo on each of the six basic chord structures.

Ex. 2

- MAJOR: 6 - 7 - 6 : 1 - 9 - 1
- MINOR: 6 - 7 - 6 : 1 - 9 - 1
- DOM. 7th: 1 - 9 - 1 : 3 - 11 - 3 : 5 - 13 - 5
- MIN. 7th: 1 - 9 - 1 : b3 - 11 - b3
- AUG. 7th: 1 - 9 - 1 : 3 - #11 - 3
- DIM. 7th: chord note - Whole step above - chord note

Example No. 2 in musical notation would appear as follows:

Ex. 3

MAJOR: MINOR:

C 6 - 7 - 6 1 - 9 - 1

C^m 6 - 7 - 6 1 - 9 - 1

*C*⁷ DOM. 7th:

1 - 9 - 1 3 - 11 - 3 5 - 13 - 5

*Cm*⁷ MIN. 7th:

1 - 9 - 1 *b*3 - 4/11 - *b*3

*Cx*⁷ AUG. 7th:

1 - 9 - 1 3 - #11 - 3

C^{o7} DIM. 7th:

Lo - Hi - Lo Lo - Hi - Lo Lo - Hi - Lo Lo - Hi - Lo
6 - 7 - 6 1 - 9 - 1 *b*3 - 11 - *b*3 *b*5 - *b*13 - *b*5

2. HI-CHROMATIC-LO

Ex. 4 (a) (b) (c)

C *D*⁷ *Bbm*

9 - ch - 1 13 - ch - 5 7 - ch - 6

Following is an illustration showing all of the various possibilities for Hi-ch-Lo.

Ex. 5

MAJOR: 7 - ch - 6 : 9 - ch - 1

MINOR: 7 - ch - 6 : 9 - ch - 1

DOM. 7th: 9 - ch - 1 : #11 - ch - 3 : 13 - ch - 5

MIN. 7th: 9 - ch - 1 : 11 - ch - *b*3

AUG. 7th: 9 - ch - 1 : #11 - ch - 3

DIM. 7th: Hi - ch - Lo

Note: Hi-ch-Lo is not possible when moving from scale eleven to three on the Dom. 7th chord.

Example No. 5 in musical notation would appear as follows:

ex. 6

MAJOR: *C* *7-ch-6* *9-ch-1*

MINOR: *Cm* *7-ch-6* *9-ch-1*

DOM. 7th: *C7* *9-ch-1* *#11-ch-3* *13-ch-5*

MIN. 7th: *Cm7* *9-ch-1* *#11-ch-b3*

AUG. 7th: *Cx7* *9-ch-1* *#11-ch-3*

DIM. 7th: *C07* *H2-ch-Lo* *7-en-6* *H2-ch-Lo* *9-en-1* *H2-ch-Lo* *11-en-b3* *H2-ch-Lo* *b13-en-b5*

3. LO-HI-CHROMATIC-LO

Ex. 7

(a) *C* *1-9-ch-1*

(b) *D7* *5-13-ch-5*

(c) *Bbm* *6-7-ch-6*

The following chart includes all of the possible usages of Lo-Hi-ch-Lo.

Ex. 8

MAJOR: 6 - 7 - ch - 6 : 1 - 9 - ch - 1
 MINOR: 6 - 7 - ch - 6 : 1 - 9 - ch - 1
 DOM. 7th: 1 - 9 - ch - 1 : 3 - #11 - ch - 3 : 5 - 13 - ch - 5
 MIN. 7th: 1 - 9 - ch - 1 : b3 - 11 - ch - b3
 AUG. 7th: 1 - 9 - ch - 1 : 3 - #11 - ch - 3
 DIM. 7th: Lo - Hi - ch - Lo

The preceding chart of Lo-Hi-ch-Lo would appear as follows in musical notation.

Ex. 9

MAJOR:

MINOR:

6 7 ch 6 1 9 ch 1

6 7 ch 6 1 9 ch 1

DOM. 7th:

1 9 ch 1 3 #11 ch 3 5 13 ch 5

MIN. 7th:

1 9 ch 1 b3 11 ch b3

Aug. 7th:

1 9 ch 1 3 #11 ch 3

DIM. 7th:

Lo-Hi-ch-Lo 6-7-CH-6 Lo-Hi-ch-Lo 1-9-ch-1 Lo-Hi-ch-Lo b3-11-ch-b3 Lo-Hi-ch-Lo b5-b13-ch-b5

(At this point it would be advisable to complete Problems 1, 2 and 3 of the lesson assignment.)

An interesting melodic line may be composed by applying the preceding variations to a given chord progression. In the following example, only Hi-Lo and variations of Hi-Lo have been used.

Ex. 10

Staff 1: C (9-ch-1, 7-6), Gm7 (1-9-1, 4/11-3), C7 (7-ch-6, 7-6), F (9-ch-1, 7-6), Fm (9-ch-1, 7-6).

Staff 2: C (1-9-ch-1), D7 (9-1, 13-ch-5), Dm7 (11-b3, 13-ch-5), D67 (13-ch-5), C (7-ch-6).

B. HARMONIZATION OF VARIATIONS OF HI-LO

1. LO-HI-LO may be harmonized either of two ways.

a. sustain three lower voices while lead moves:

Ex. 11

(a) C, (b) D7, (c) Ebm.

b. sustain two lower voices while two upper voices move in thirds:
(possible only where double Hi-Lo may be used; see Lesson 9)

Ex. 12

(a) C, (b) D7.

2. HI-CHROMATIC-LO may be harmonized as follows:

a. sustain three lower voices while lead moves:

Ex. 13

(a) (b) (c)

C D7 Bbm

b. sustain two lower voices while two upper voices move in thirds;
(possible only where double Hi-Lo may be used)

Ex. 14

(a) (b)

C D7

c. harmonize the "chromatic" as a chromatic approach note.

Ex. 15

(a) (b) (c)

C D7 Bbm

C → D7 → Bbm → C

1b - C - 5
3 - C - 3
9 - C - 9
b7 - C - b7

3. LO-HI-CHROMATIC-LO may be harmonized by any of the following methods:

a. sustain three lower voices while lead moves:

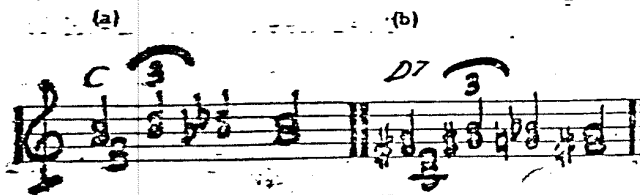
Ex. 16

(a) (b) (c)

C D7 Bbm

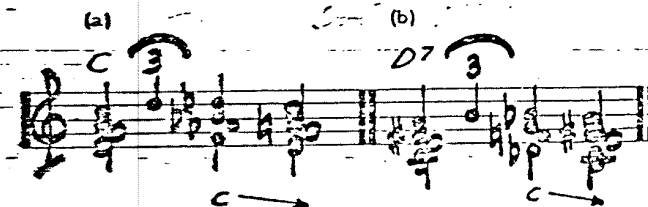
- b. sustain two lower voices while two upper voices move in thirds:
(only where double Hi-Lo could apply)

Ex. 17



- c. harmonize the "chromatic" as a chromatic approach note:

Ex. 18



Using the preceding principles, the harmonization of Example 10 might appear as follows:

19



C. ALTERED TENSIONS

In addition to the regular high degree chord notes already discussed, certain "altered tensions" may be used in specific cases. They all occur with the Dominant 7th chord and are:

Ex. 20

The harmonization of these altered tensions would appear as follows:

Ex. 21

An effective form of hi-lo using altered tensions is #9 to b9 on the dominant 7th chord. The harmonization is as follows:

Ex. 22

D. MELODIC ANALYSIS (Concluded)

This completes our classification of those melodic functions and patterns that may be effectively used and their respective harmonizations. Following is a complete listing with appropriate coding for melodic analysis.

- Chord notes..... |
- Scalewise approach notes..... s
- Chromatic approach notes..... c
- Delayed Resolutions..... d.r.
- Double chromatic approaches..... d.c.
- Unresolved tensions..... by degree name
- Hi-Lo and Variations of Hi-Lo..... by degree name

It is important that you have a complete and thorough understanding of each of these melodic possibilities if you are to derive the maximum benefit from future lessons. Spend whatever time may be necessary in reviewing past lessons should there be any doubt whatsoever in your mind concerning their derivation or usage.

Here is an example of a melodic improvisation utilizing the above possibilities.

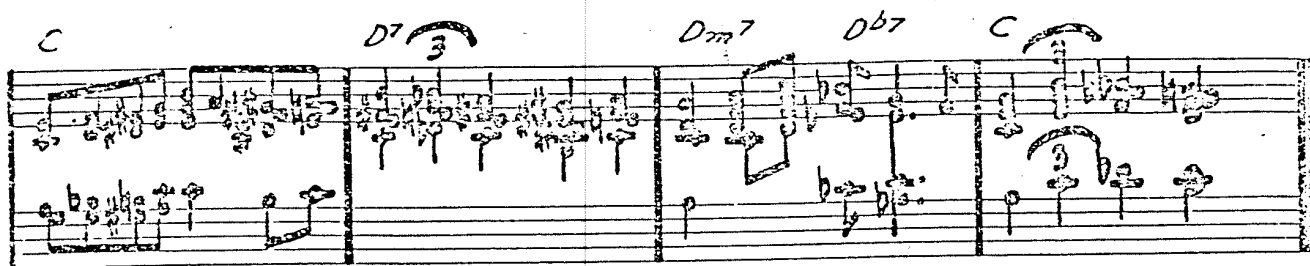
Ex. 23

Example 23 is a melodic improvisation exercise. The first staff shows a sequence of chords: C, Gm7, C7, F, and Fm. The melodic line is written in treble clef. Below the staff, the notes are transcribed as: 9-ch-1 7 c 9-1 4/11-b3 13-ch-5 c | c | | s | | d.r. c. The second staff continues the sequence with chords: C, D7, Dm7, Db7, and C. The melodic line is also in treble clef. Below the staff, the notes are transcribed as: 1 d.c. 7-6 c | 13-c-5 c | 11 | | 13 #11-3 | 7-ch-6.

The modern block harmonization of Example 23 might appear as follows:

Ex. 24

Example 24 is a modern block harmonization of Example 23. It shows the same sequence of chords: C, Gm7, C7, F, and Fm. The melodic line is written in treble clef. The notes are transcribed as: 9-ch-1 7 c 9-1 4/11-b3 13-ch-5 c | c | | s | | d.r. c. The second staff continues the sequence with chords: C, D7, Dm7, Db7, and C. The notes are transcribed as: 1 d.c. 7-6 c | 13-c-5 c | 11 | | 13 #11-3 | 7-ch-6.



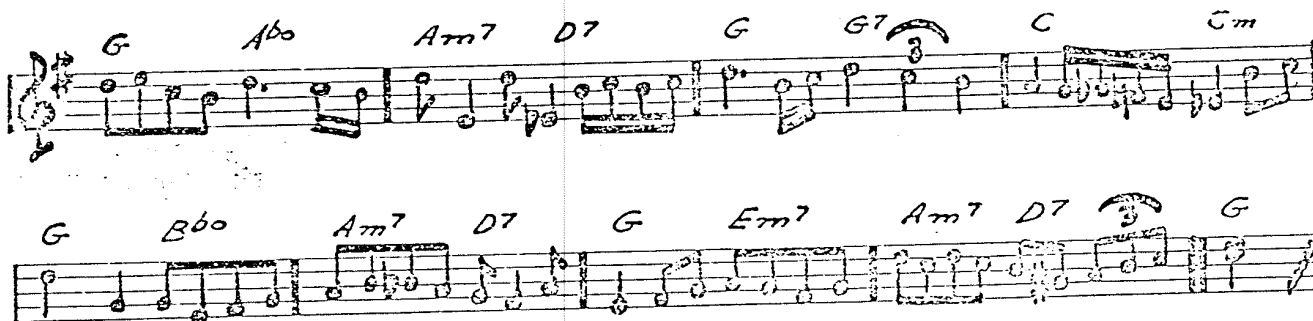
Logically enough, these same possibilities may be employed in the melodic improvisation of a given melody. As in earlier discussions on improvisation, try to maintain the basic character of the original melody while using various devices to form an interesting melodic variation.

Ex. 25

(a) given melody



(b) melodic improvisation



ASSIGNMENT:

1. Notate all possible forms of Lo-Hi-Lo on each of the six basic chord structures, starting on each of the following notes: (See Ex. 2 and 3)

Chromatic approach: C, F, Bb, Eb, Ab, Db, (F#), B, E, A, D, G

Delayed resolution:

2. Using the above list of starting notes, notate all forms of Hi-Chromatic-Down-Lo. (See Ex. 5 and 6)

3. Again, starting on each of the notes listed in Problem No. 1, notate all possible forms of Lo-Hi-Chromatic-Lo. (See Ex. 8 and 9)

4. Using the following chord progressions as a guide, compose original melodies based exclusively on Hi-Lo and its variations. (See Ex. 10)

(a)

Cm⁷ F⁷ Fm⁷ Bb⁷ Eb⁷ Fm⁷ Gm⁷ G^b

Fm⁷ Db⁷ Bb⁷ Eb⁷ Ab^m Eb⁷

(b)

F⁷ Dm⁷ Gm⁷ C⁷ F⁷ F#^o Gm⁷ G⁷

F⁷ F⁷ Bb⁷ Eb⁷ F⁷ Bb^m F⁷

(c)

G⁷ Ab^o Am⁷ D⁷ G⁷ G⁷ C⁷ Cm⁷

G⁷ Bb^o Am⁷ D⁷ G⁷ F⁷ G⁷

(d)

Chord progression for (d): D^b , E^b_{m7} , E^b_{m7} , A^b7 , D^b , E^b_{m7} , $D7$

(e)

Chord progression for (e): D^b7 , C , B^b_{m7} , E^b7 , A^b , F_m , $G7$

Chord progression for (e) (bottom staff): C_m , D_m7 , $G7$, C , E^b7 , C

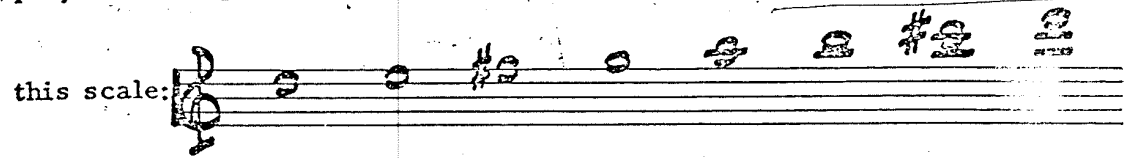
5. Harmonize each of the melodies composed for Problem No. 4 using any of the harmonization techniques discussed in this lesson. (See Ex. 19)
6. Again using the chord progressions from Problem No. 4 as a guide, compose original melodies utilizing all of the melodic variations catalogued in this lesson. Code each note as in Ex. 23.
7. Complete a modern block harmonization of each of the melodies composed in Problem No. 6. (See Ex. 24)
8. Again, utilizing these same melodic devices, write a melodic improvisation of any standard tune of your choice, being certain that the basic character of the original melody is retained. (See Ex. 25)
9. Write a modern block harmonization in open position of the melody resulting from Problem No. 8.

Skip to (12)

LESSON 11 INSTRUMENT RANGES

$\text{C D E F G A B C} = 1 \dots$
 played on the piano, would sound the same as

$= TS =$
 T.S. notes ~~TS~~ whole step
 ABOVE concert key.



played on the tenor sax.

In finding the transposed key for the tenor sax, simply think up one whole step, since the addition of the octave would not affect the key relationship in any way. If the concert key were Eb, the proper key for the tenor sax would be F.

Following is a melody, first as it might appear in concert and then transposed for the Bb tenor sax.

Ex. 3 Concert



Bb Tenor Sax



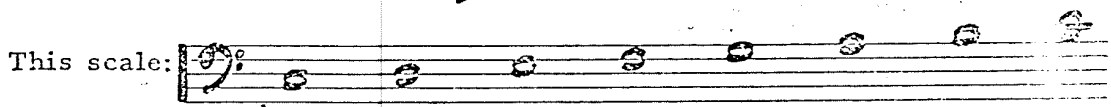
4. Eb BARITONE SAX --- transpose up a major sixth plus an octave from the concert note.

This note:

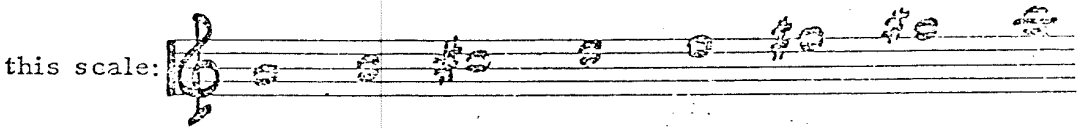
when played on the piano would

sound the same as this note:

on baritone sax.



played on the piano would sound the same as



played on the baritone sax.

Since the extra octave does not affect the key relationship, simply figure a major sixth higher when determining the proper transposed key for the baritone sax.

If the concert key were C the baritone sax part would be written in the key of A (the same as the alto sax).

To illustrate the foregoing, here is a melodic line, first in the concert key and then transposed for the Eb Baritone Sax.

Concert Ex. 4

(a)

(b)

Eb Baritone Sax

The image shows two musical staves. Staff (a) is labeled 'Concert Ex. 4' and contains a melodic line in concert key (C major) written on a bass clef staff. Staff (b) is labeled 'Eb Baritone Sax' and contains the same melodic line transposed for the Eb Baritone Sax, written on a treble clef staff. The transposition is a major sixth higher than the concert key.

NOTE: When transposing for the reed section, remember that the individual parts are always written in the treble clef, regardless of their appearance in the concert score.

B. RANGES

Naturally, there are certain limitations as to just how high and how low each instrument is capable of playing. The distance between the lowest note and the highest note is called the range of the instrument. The following illustration shows two sets of ranges for each instrument. The first is the "possible" range, i.e., the ordinary physical limitations of the instrument. The second is the "practical" range, i.e., the range which you may assume to be comfortable for any reasonably adequate instrumentalist. It is always wiser to confine your writing to the practical ranges. The extreme ranges should be used only where absolutely necessary or in cases where the arranger is familiar with the individual musicians' facilities.

Remember that the best planned and most musically conceived score is of no practical value unless it can be comfortably played and interpreted by the instrumentalist.

(Refer to RANGE CHART on the following page.)

RANGE CHART

Ex. 5

Concert

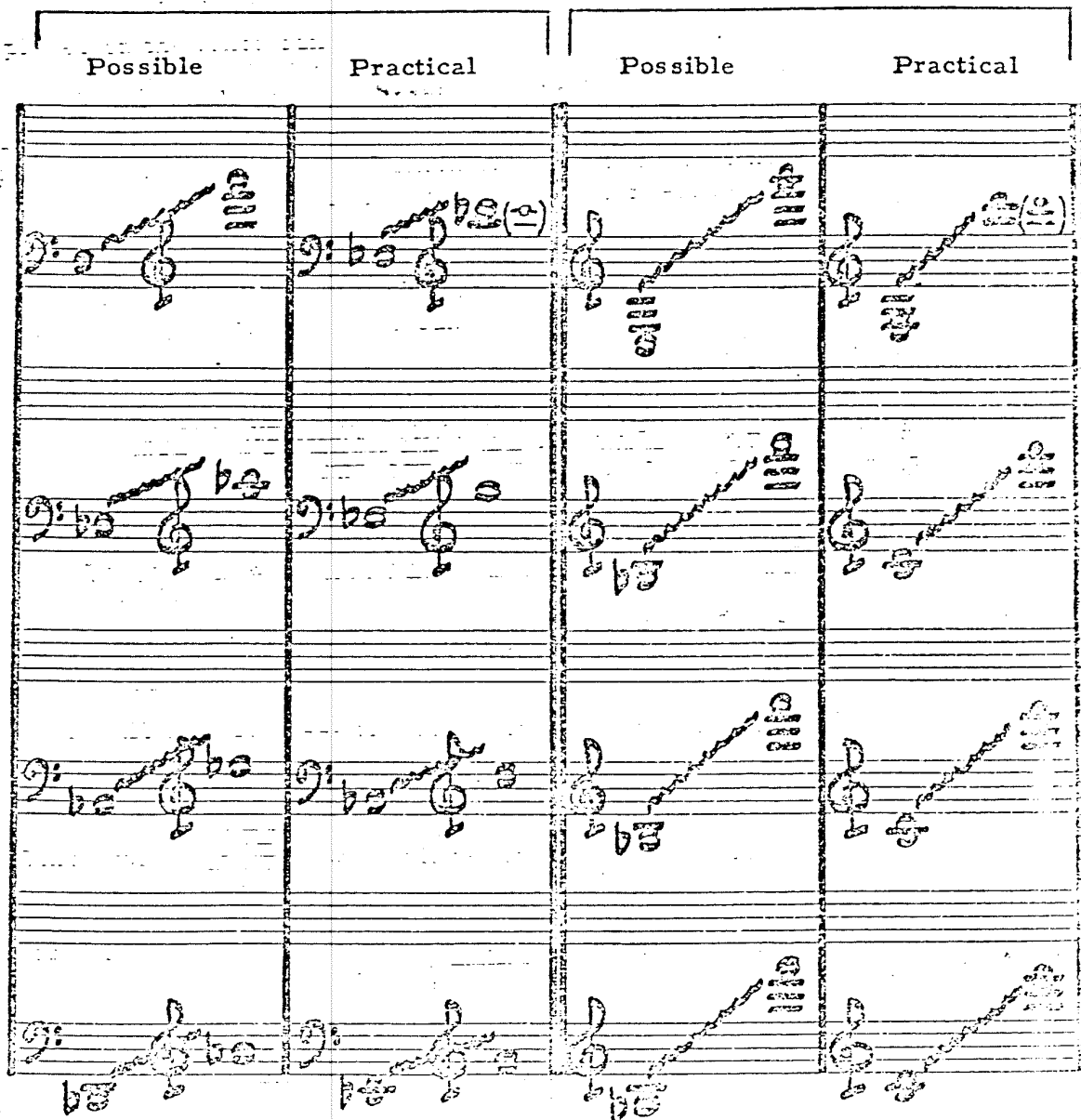
Transposed

Bb CLAR.

Eb ALTO

Bb TENOR

Eb BARI.



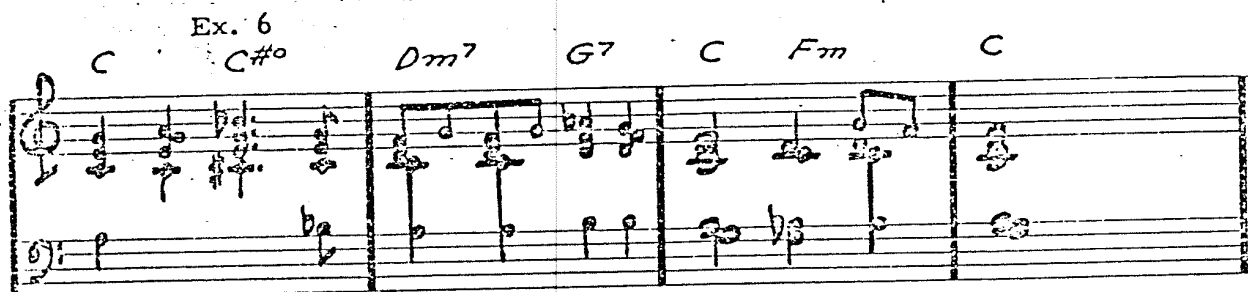
C. VOICINGS

Although there are several different combinations of reed instruments that can be used in a four-part saxophone section, the most common is:

- I Eb alto
- II Eb alto
- III Bb tenor
- IV Bb tenor

Let us assume that we have prepared a four-part block harmonization of a given melody in concert sketch form.

Ex. 6

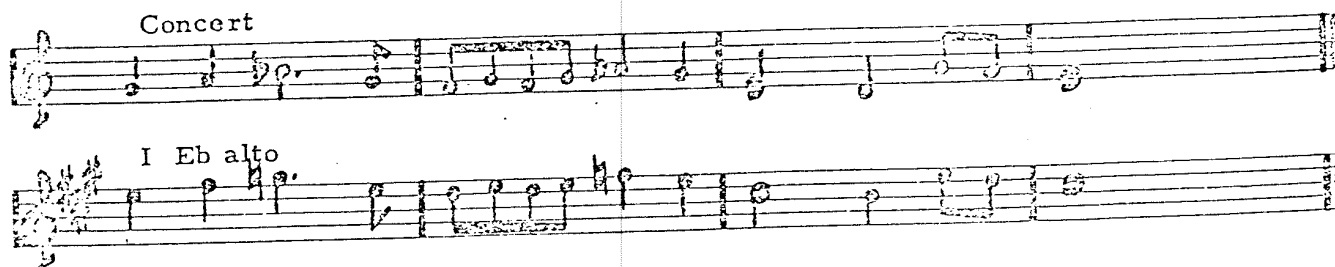


To apply the aforementioned saxophone voicing to this block harmonization, transpose parts for the individual instruments as follows:

NOTE: Remember that the transposed key for Eb instruments will be a major sixth higher than the concert key, and the transposition for the Bb instruments will be one whole step higher than the concert key.

1. Transpose the top note all the way through for the first Eb alto sax (See Ex. 6).


Ex. 7



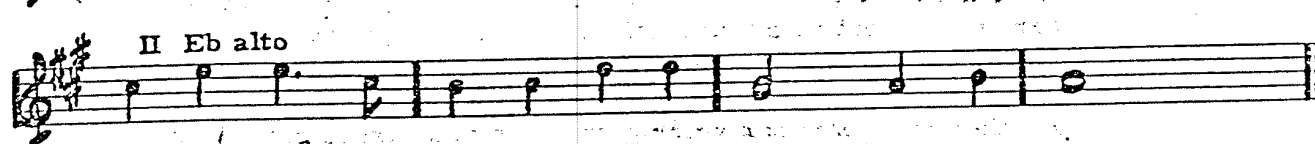
2. Transpose the second note (from the top) all the way through for the 2nd Eb alto sax (see Ex. 6).

Ex. 8

Concert



II Eb alto



3. Transpose the third note (from the top) all the way through for the 3rd Bb tenor sax (see Ex. 6).

Ex. 9

Concert




III Bb tenor



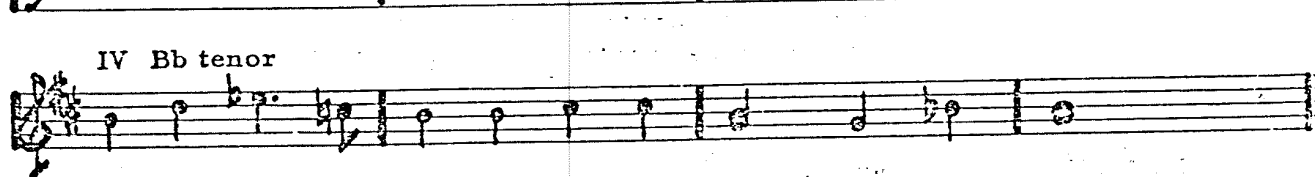
4. Transpose the bottom note all the way through for the 4th Bb tenor sax (see Ex. 6).

Ex. 10

Concert



IV Bb tenor



NOTE: In transposing individual parts, use enharmonic spelling wherever resulting notation seems more practical.

The resulting parts when played by the respective instrumentalists will produce the same sound as the original concert score, but with that distinctive quality which comes from the particular sax voicing used.

Another four-part sax voicing which is quite frequently used is as follows:

- I Eb alto
- II Bb tenor
- III Bb tenor
- IV Eb baritone

The above reed voicing is particularly effective when the four-part harmonization is converted to open position as discussed in Lesson No. 3. As a reminder, here is the rule for producing open harmony.

TO PRODUCE OPEN HARMONY, DROP
THE SECOND VOICE (FROM THE TOP)
OF ANY CLOSED CHORD DOWN ONE
OCTAVE.

(Refer to Lesson No. 3 for further detail regarding open harmony.)

Here is an example of a four-part harmonization in open position and the transposed parts written as they would appear using the above voicing.

Ex. 11

melody

four-part open harmonization

C C#o Dm7 G7 C Fm C

Ex. 12

(a) I Eb Alto

(b) II Bb Tenor

(c) III Bb Tenor

(d) IV Eb Baritone

Although the transposed parts have been written one above the other in the preceding example for the sake of convenience, it would be necessary to transpose the individual parts on separate sheets of manuscript if they were to be performed by individual instrumentalists.

Also, be sure to remember that it is essential that the parts be legibly and clearly written. The musicians will be able to give a better and more concentrated interpretation of the music if they are not forced to struggle to understand the notation.

D. EXPRESSION MARKS

An understanding of the proper usage of expression marks is vital to the arranger in transmitting his intentions and interpretation to the instrumentalist. Conversely, it is also essential that the instrumentalist understand and observe these expression marks carefully if the arrangers' musical ideas are to be effectively performed.

Following is a reference chart of the most commonly used expression marks and their meaning.

REFERENCE CHART EXPRESSION MARKS

symbol	name	meaning
<u>symbol</u>	<u>name</u>	
f	forte	loud
ff	fortissimo	very loud
fff	fortississimo	very, very loud
mf	mezzo forte	medium loud
p	piano	soft
pp	pianissimo	very soft
ppp	pianississimo	very, very soft
mp	mezzo piano	medium soft
	accent	attack sharply
	staccato	short
	marcato	give full value
	drop	attack on pitch - slur off
	bend	lift, or upward slur off
	gliss.	lift or drop to given note
	slur	legato (play smoothly)
	fermata	hold
	crescendo	gradually louder
	decrescendo	gradually softer
	trill	trill
Rit.	ritard	gradually slower
D. C.	Da Capo	to the beginning
D. S.	Del Segno	back to the Segno (sign)
	Segno	the sign
	Coda	Coda
Fine	Fine	the end
D. S. al		start back at the sign - play until Coda sign - then jump to Coda (play to Fine)
V. S.	volto subito	turn page quickly
8Va		octave higher
8Vb		octave lower

NOTE:

In all future assignments, try to make use of expression marks in both score and parts to indicate your intentions as precisely as possible.

ASSIGNMENT

1. Write a four-part block harmonization of each of the following melodies.

(a)

Chords: Db7, C, Eb7, Ab, Db7, C, A7

Voicings: 13-5, 1, 7, 9, b13, 1, b3, 5, 13-5, 1

(b)

Chords: Gb7, Fm, Gm7(b5)C7, Fm, Bbm7, Eb7

Voicings: #11-3, 9, 1, 1-#3-b9, 5, 1, 3, 1

(c)

Chords: Ab, F(b5), Bbm7, Eb7, Ab, Db7, Gm7(b5)C7

Voicings: 1, b13, 1, 13, 1, 5-13-5, 1

2. Using the following voicing:

- I Eb Alto
- II Eb Alto
- III Bb Tenor
- IV Bb Tenor

Transpose the individual parts from the harmonizations in Problem No. 1 for the reed section.

3. Write a four - part block harmonization of the following melodies in open position.

(a)

Chords: Fm7, E7, Eb, Bbm7, Eb7, Ab

Voicings: 9, 11, 3, 11, 9, 1, 5, 1, 1, 9, 13, 5, 7, 1, 1, 1

(b)

Chords: Db7, Eb, Cm7, Fm7, Bbm7(b5), Eb, C7(b9), Fm7

Voicings: 13, 5, 1, 1, 5, 1, 3-11, 1, 13-11-b3, 1, 5, 1, 1, 1

(cont'd next page)

(Prob. No. 3 - cont'd)

(b)

Chords: D7(b9), Gm7, C7, F#m7, D7(b9), Gm7, C7, CAUG7, F, D7(b9), Gm7, F7, Bb7, Eb, CAUG7, C7, F7, Bb7.

Fingerings: 9-1, 1, 1, 9-1, 1, b13-5, 1, 11-3, 5, 13-b13-1, 13-b13-9, 1.

(c)

Chords: Eb, CAUG7, C7, F7, Bb7.

Fingerings: 9-13, 9, 1, 13-9, 13-5, 13-b13-1, 13-b13-9, 1.

4. Transpose the individual parts from the harmonizations in Problem No. 3 using the following voicing:

- I Eb Alto
- II Bb Tenor
- III Bb Tenor
- IV Eb Baritone

5. Write a four-part block harmonization of any standard tune of your choice and transpose parts as follows:

- I Bb Clarinet
- II Eb Alto
- III Eb Alto
- IV Bb Tenor

LESSON 12

A. PRINCIPLES OF BACKGROUND WRITING

The past several lessons have dealt primarily with various devices relating to block harmonization, i.e., the technique of concerting under voices to a moving melodic line in "block" fashion.

In this lesson, however, we concern ourselves with the principles of background writing, i.e., the technique of composing a supporting harmonic background to a separate melodic line.

The importance of a thorough understanding of the following material cannot be over-emphasized, since the ability to play or write effective background lines is essential.

The following outline will serve as a guide in composing a background to a given melody.

1. USING CHORD NOTES ONLY, WRITE A SMOOTH MELODIC COUNTER-LINE BASED ON THE FOLLOWING PRINCIPLES:

- Where melody moves, sustain background; where melody sustains, move background.

Ex. 1

given melody

background
rhythm only)

- As in simple harmonic continuity, try to establish a smooth melodic connection between chords by sustaining, or moving chromatically or stepwise. However, leaps may occur freely while the chord remains the same.

Ex. 2

Chords: C, Eb°, Dm7, G7(b9), C, Em7(b5), A7

- c. Where melody and counter line attack at the same time, it is best (for the present) to keep the counter line at least a third, and not more than an octave from the melody.

Ex. 3

a)

Chords: C, Eb°, Dm7, G7(b9), C, Em7(b5), A7

In the following illustration all points marked (X) would be considered to be bad.

b)

Chords: C, Eb°, Dm7, G7(b9), C, Em7(b5), A7

- d. Where melody and counter line do not attack at the same time, they may cross freely.

Ex. 4

Chords: Dm7, G7(b9), C, Eb°, Dm7, G7(b9), C

2. AFTER A LINE HAS BEEN COMPOSED IN ACCORDANCE WITH THE PRECEDING PRINCIPLES, COMPLETE A BLOCK HARMONIZATION OF THIS COUNTER-LINE.

Ex. 5

a)

given melody

top voice of background

Chords: C, Eb°, Dm7, G7(b9), C, Em7(b5), A7

b)

given melody

harmonized background

Chords: C, Eb°, Dm7, Gm7(b9), C, Em7(b5), A7

Ex. 6

given melody

top voice of background

given melody

harmonized background

(At this point it would be advisable to complete Problem #1 of the lesson assignment.)

UNRESOLVED TENSIONS may often be used effectively in composing the melodic counter-line which is to serve as the top voice of the background. The proper use of these tensions will create many new and interesting possibilities for smooth melodic connections between adjacent chords.

Here is an example of a background utilizing unresolved tensions in the top voice.

Ex. 7

a)

given melody

top voice of background

Chords: F, Gm7, C7(b9), F, Ab°

Top voice of background notes: 9, 7, 9, 7, 9, Hi

b)

given melody

harmonized background

Chords: F, Gm7, C7(b9), F, Ab°

Harmonized background notes: 9, 7, 9, 7, 9, Hi

F Ab° Gm7 C7(b9) F Eb7 F

Hi-lo and variations of hi-lo may also be used in background writing and will often serve to provide melodic interest where needed.

Note the effective use of hi-lo in the top voice of the following background.

Ex. 8

given
melody

G Ab° Am7 D7(b9) G

top voice of
background

Am7 D7(b9) Bm7 E7(b9) Am7 D7(b9) G

given
melody

G Ab° Am7 D7(b9) G

harmonized
background

Am7 D7(b9) Bm7 E7(b9) Am7 D7(b9) G

To be certain that all of the foregoing is perfectly clear, here is another example of a background to a given melody employing not only low degree chord notes in the top voice, but unresolved tensions and variations of Hi-lo as well.

Ex. 9

(a)

given melody

top voice of background

Fm7 Bb7 Eb Fm7 Bb7 Gm7(b5) C7

Fm7 Abm Cm7 C7(b9) Fm7 Bb7 E7

Eb Abm Eb

given
melody

First system of musical notation. The top staff is labeled "given melody" and contains a sequence of notes. The bottom staff is labeled "harmonized background" and contains a sequence of chords and notes. The chords are: Fm7, Bb7, Eb, Fm7, Bb7, Gm7(b5), and C7. The notation includes various musical symbols such as notes, rests, and bar lines.

Second system of musical notation. The top staff is labeled "given melody" and contains a sequence of notes. The bottom staff is labeled "harmonized background" and contains a sequence of chords and notes. The chords are: Fm7, Abm, Gm7, C7(b9), Fm7, Bb7, and E7. The notation includes various musical symbols such as notes, rests, and bar lines.

Third system of musical notation. The top staff is labeled "given melody" and contains a sequence of notes. The bottom staff is labeled "harmonized background" and contains a sequence of chords and notes. The chords are: Eb, Abm, and Eb. The notation includes various musical symbols such as notes, rests, and bar lines.

As with regular block harmony, a closed background may be converted to open position by dropping the second voice down one octave. Here is example #8b as it would appear in open position.

Ex. 10

given melody

harmonized background (open position)

Chords: G, Ab°, Am7, D7(b9), G, Am7, D7(b9), Bm7, E7(b9), Am7, D7(b9), G

The subject of background writing will be continued in Lesson No. 13 with a discussion of some additional techniques which are effective in writing good musical backgrounds, and a description of some of the many different styles of backgrounds which the arranger may be called upon to produce.

ASSIGNMENT

1. Write a background to each of the following melodies using the procedure described below:
 - a. compose a suitable top voice for the background using low degree chord notes only.
 - b. complete the background by filling in the block harmonization of this top voice.
(See Examples No. 5 & 6)

a)

b)

c)

2. Once again, write a background to each of the following melodies using the procedure described below:

- a. compose a suitable top voice for the background using not only low degree chord notes, but unresolved tensions and variations of hi-lo as well.
- b. complete the background by filling in the block harmonization of this top voice.
(See Example No. 9)

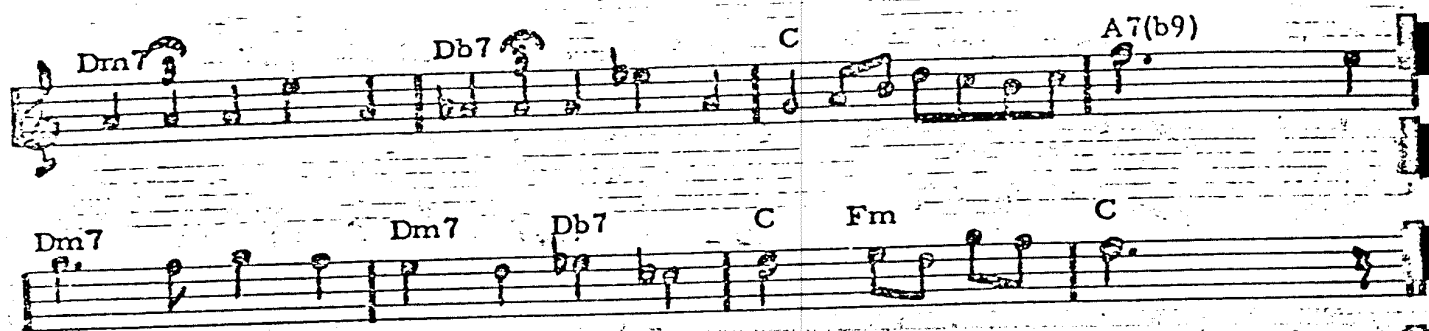
a)

b)

c)

3. Compose a background to each of the following melodies similar to Problem No. 2, but harmonize each of the backgrounds in open position. In each case, compose the top voice first before completing the harmonization. (See Ex. No. 10)

a)



4. Using the techniques described in this lesson, compose a background to any two standard tunes of your choice.

NOTE: It would be advisable to select smooth ballads rather than swing type tunes, since many of the techniques relating to swing backgrounds will be covered in Lesson No. 13.

5. Transpose parts from either one of the tunes in Problem #4 as follows:

SOLO MELODY:

Bb Clarinet

BACKGROUND:

- I Eb Alto sax
- II Bb Tenor sax
- III Bb Tenor sax
- IV Eb Baritone sax

LESSON NO. 13

BACKGROUND WRITING (continued)

A. APPROACH NOTES

All of the melodic approach techniques described in earlier lessons dealing with improvisation may also be used in background writing. These approach techniques are effective in creating added melodic interest in the background and will serve to provide many new and interesting possibilities for melodic variation.

In the following example note the smooth melodic motion achieved through the occasional use of approach notes.

Ex. 1

Even melody

voice of background

harmonized background

The musical score for Example 1 consists of three staves. The top staff is the 'Even melody' in treble clef, with a key signature of one sharp (F#) and a 4/4 time signature. It features a series of eighth and quarter notes, with some notes marked with 's' (sustained) and 'c' (chord). The middle staff is the 'voice of background' in treble clef, providing a harmonic support with chords and some melodic lines. The bottom staff is the 'harmonized background' in bass clef, featuring a more complex harmonic texture with many notes. Above the staves, the following chords are indicated: C, Dm7, G7, Dm7, C7(b9), and C. The score illustrates the use of approach notes to create smooth melodic motion in the background.

In order to avoid any melodic conflict, be sure to avoid attacking an approach note in the background at the same time that a chord note is being attacked in the melody.

Following is an illustration of this point:

Example 2 (bad) shows a melody line and a harmonized background. The melody is written in treble clef, and the background is in bass clef. The key signature has one sharp (F#). The background accompaniment consists of chords and single notes. The melody is marked with 'X' on the notes G, A, B, and C, indicating incorrect phrasing. The background accompaniment includes chords G, Bb7, F, C7, and C.

Ex. 2 (bad)

Example 3 shows a melody line and a harmonized background. The melody is written in treble clef, and the background is in bass clef. The key signature has one sharp (F#). The background accompaniment consists of chords and single notes. The melody is marked with 'X' on the notes G, A, B, and C, indicating incorrect phrasing. The background accompaniment includes chords G, Bb7, F, C7, and C.

To further clarify this same principle, here is an example emphasizing the correct use of approach notes.

Ex. 3

Example 3 shows a melody line and a harmonized background. The melody is written in treble clef, and the background is in bass clef. The key signature has one sharp (F#). The background accompaniment consists of chords and single notes. The melody is marked with 'X' on the notes G, A, B, and C, indicating incorrect phrasing. The background accompaniment includes chords G, Bb7, F, C7, and C.

given melody
top voice of
background
harmonized
background

B. RESTS

The use of rests in the background will often serve to provide relief from the monotony that may result from a continuous sustained sound. There is no set rule as to when it is most advisable to use rests, but the following applications are frequently employed.

- Rests may be used to sub-divide the background into natural "phrases". These phrases are usually either two or four bars in length, and rests may be used in the background to emphasize the natural phrase division of the original melody.

Ex. 4

given melody

top voice of background

harmonized background

The musical score for Example 4 is presented in two systems. The first system consists of five measures. The top staff, labeled 'given melody', contains a sequence of notes with the following chords indicated above: F, Ab°, Gm7, C7, F, Ab°, and Am7(b5) D7. The middle staff, labeled 'top voice of background', shows a melody with rests in the second, third, and fourth measures. The bottom staff, labeled 'harmonized background', shows a piano accompaniment with chords and rests. The second system consists of four measures. The top staff shows the continuation of the given melody with chords: Gm7, Eb7, F, Ab°, Gm7, C7(b9), and F. The middle staff shows the top voice of the background with rests in the second, third, and fourth measures. The bottom staff shows the harmonized background with chords and rests. The fourth measure of the second system is marked 'd.c.' (Da Capo).

- b. Rests may be used in creating a background made up of detached "figures". These figures are short melodic fragments which provide background interest during sustained or open portions of the melody. Following is an example of a background made up primarily of these fill-in figures.

Ex. 5

given melody

p voice of background

harmonized background

The musical score for Example 5 is written in G minor, 4/4 time. It consists of three systems of staves. The first system has four staves: the top staff is the 'given melody' (treble clef), the second is the 'p voice of background' (treble clef), the third is the 'harmonized background' (treble clef), and the fourth is the 'harmonized background' (bass clef). The second system has three staves: the top staff is the 'given melody' (treble clef), the second is the 'p voice of background' (treble clef), and the third is the 'harmonized background' (bass clef). The third system has three staves: the top staff is the 'given melody' (treble clef), the second is the 'p voice of background' (treble clef), and the third is the 'harmonized background' (bass clef). The background is composed of short melodic fragments (figures) that provide interest during sustained or open portions of the melody. The figures are primarily eighth and sixteenth notes, often beamed together. The harmonized background consists of chords and single notes in the bass line.

Chords: Gm7, C7(b9), F, Ab⁰, Gm7, C7, Cm, D7, Gm7, C7, F, Eb7, F.

C. SEQUENCE

Although the subject of sequence will be covered more thoroughly in future lessons, the principle of sequence in relation to background writing will be introduced at this time. Basically, sequence represents the reiteration of a previous phrase or figure in some recognizable form. Any variation of the original theme may be used, provided that a similarity between the two may be recognized by the listener.

Note the sequential relationship between the first two bars and the next two bars of the following example.

Ex. 6

Gm7 C7 F Ab° Gm7 C7 F

Following are several illustrations of sequential repetition:

Ex. 7

Aaug7 (b9) Dm7 G7(b9) C Eb7 Dm7 G7(b9)

Ex. 8

Am7 D7 G Am7 D7 G Am7

Ex. 9

Gm7 C7 F Ab° Gm7 C7 F

Example 10 shows the use of "sequence" in composing the background to a given eight bar melody.

10

Gmaj7 Em7 Am7 D7 Am7 D7(b9) Dm E7(b9) (b13)

Am7 D7(b9) G Bb7 Am7 D7(b9) G

The score is written for piano and voice. The piano part is in the lower staves, and the voice part is in the upper staves. The key signature is one sharp (F#). The time signature is 4/4. The chords are indicated above the staff: Am7, D7(b9), G, Bb7, Am7, D7(b9), and G.

D. SWING BACKGROUNDS

In composing the background to a swing type melody, the following principles should be observed:

- Compliment and emphasize the swing feeling of the melodic line through the use of anticipations and rhythmic figures in the background.

Ex. 11 (bad)

C C#^o Dm7 Gaug7(b9) Em7 C#^o Dm7 G7

The score is written for piano and voice. The piano part is in the lower staves, and the voice part is in the upper staves. The key signature is one sharp (F#). The time signature is 4/4. The chords are indicated above the staff: C, C#^o, Dm7, Gaug7(b9), Em7, C#^o, Dm7, and G7. The labels on the left indicate the different parts: "given melody" for the voice part, "top voice of background" for the upper piano part, and "harmonized background" for the lower piano part.

Ex. 12 (good)

Chords: C, C#° Dm7, Gaug7(b9), Em7, C#° Dm7, G7

- b. Although sustained passages may occasionally be effectively used in a swing background, rely primarily on the rhythmic (and melodic) fill-in figures for added interest.

Ex. 13

Chords: Fm7, Bb7(b9), Eb, Fm7, Bb7(b9), Bbm7, Eb7(b9)

Abm7 Db7 Gb Fm7 E7 Eb

E. BACKGROUND STYLES

Probably the most important factor in background writing is the preservation of the same feeling and mood in the background as has already been established by the existing melody. If the melody is smooth and flowing in character, then the background should compliment it in similar manner. In a case where the melody has a strong swing feeling, this same swing feeling should be present in the background.

Every tune must be treated as an individual problem and it is essential that you exercise your own musical imagination and taste at all times. It is important that you remember that the principles set forth in these lessons are designed to serve as a guide rather than a restriction.

A careful study of the following examples should give you a more definite idea of some of the many different styles of backgrounds that the arranger may be called upon to produce.

Ex. 14 Smooth ballad

Chord progression: F, Ab^o, Gm7, C7(b9), F, Ab^o, Cm, D7

Chord progression: Gm7, Bbm, F, D7(b9), Gm7, Gb7, Fmaj7

Ex. 15 Waltz

Given melody

voice of ground

onized ground

C Dm7 G7(b9)

C C#° Dm7 G7(b9)

Ex. 16 Swing

Ex. 16 Smooth Ballad

Chords: Dm7 G7 C C#° Dm7 G7 Em7(b5) A7

(an melody)

voice of background

monized background

Chords: Dm7 G7(b9) Em7 Ebm7 Dm7 G7 C C#° Dm7

Ex. 17 Beguine

given melody

top voice of background

harmonized background

Chords: G, G, Cm, Cm

Am7

D7(b9)

G

G

I

Chords: Am7, D7(b9), G, G, I

ASSIGNMENT

No. 1 Making use of any or all of the techniques discussed thus far, write a musical background to each of the following melodies:

(a)

Chords: C, Eb°, Dm7, G7, C, Gm7, C7

(b)

Chords: Ab, B°, Bbm7, Eb7, Ab, Cm7(b5), F7

No. 2 Write a background to each of the following swing melodies, emphasizing the same swing feeling in the background.

(a)

Chords: Eb, Fm7, Bbaug7, Eb, F7

(b)

F F#° Gm7 C7 F F#° Gm7 C7

F Dm7 Gm7 C7(b9) F F#° Gm7 C7

(c)

Dm7 G7 C Eb7 Dm7 G7 C

Bbm7 Eb7(b9) Ab Dm7 Db7 C

(d)

Am7 D7(b9) G Bb°

Am7 Am7 D7(b9) G Ab7 G

No. 3 Compose a suitable background for each of the following melodies.

(a) Wältz

(a)

Example 1(a) is a musical score for three staves. The first staff is in treble clef and 3/4 time, with a key signature of one flat (B-flat). It contains the following chords: Dm7, G7, Em7, A7, and Dm7. The second staff is in bass clef and contains the following chords: G7, Em7(b5), A7, Dm7, and G7. The third staff is in bass clef and contains the following chords: Em7, A7, Dm7, G7(b9), and C. The score is divided into two measures by a double bar line. The first measure contains the first three chords of each staff, and the second measure contains the last three chords of each staff. The key signature changes from one flat to natural (C major) at the beginning of the second measure.

(b) Rhumba

Two staves of musical notation for a Rhumba. The first staff contains the notes Gm7, C7, F, Ab°, Gm7, C7, Am7(b5), and D7(b9). The second staff contains the notes Gm7, C7, Am7, D7, Gm7, C7(b9), and F. The notation includes treble and bass clefs, a key signature of one flat, and a 4/4 time signature.

(c) Beguine

Two staves of musical notation for a Beguine. The first staff contains the notes Eb, E°, Fm7, and Bb7. The second staff contains the notes Fm7, Bb7(b9), and Eb. The notation includes treble and bass clefs, a key signature of two flats, and a 3/4 time signature.

No. 4 Select a standard tune in each of the following styles and compose a background to each complete chorus.

- smooth ballad (fox trot)
- waltz
- swing
- beguine (or any tune utilizing the Latin-American beat)

No. 5 Transpose parts from any one of the scores composed for Problem No. 4, as follows:

MELODY: Bb Clarinet


BACKGROUND: 1st Eb Alto
2nd Bb Tenor
3rd Bb Tenor
4th Eb Baritone


LESSON NO. 14

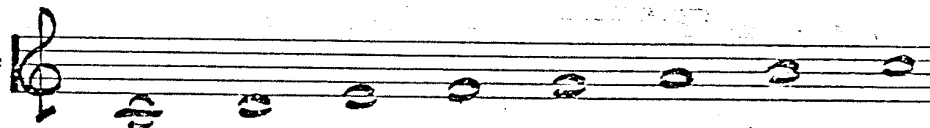
¹²₁₀ < 149
THE BRASS SECTION

A. TRANSPOSITION

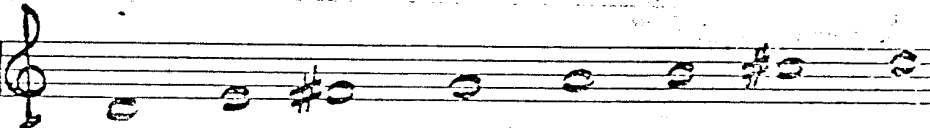
1. Bb TRUMPET --- transposes up one whole step from the concert note.

This note  played on the piano would sound the same as

this note  played on the trumpet.

This scale 

played on the piano would sound the same as

this scale 

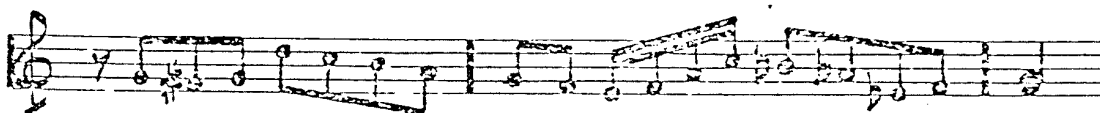
played on the trumpet.

This same principle also applies to key relationship. If the concert key were C, the trumpet would have to be in the key of D (one whole tone higher). If the concert key were Ab, then the trumpet part would be written in the key of Bb.

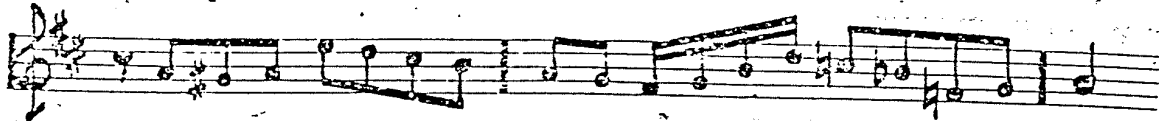
Here is a melodic line, first as it might appear in concert and then as it would appear transposed for Bb trumpet.

Ex. 1


Concert

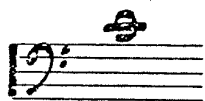


Bb trumpet

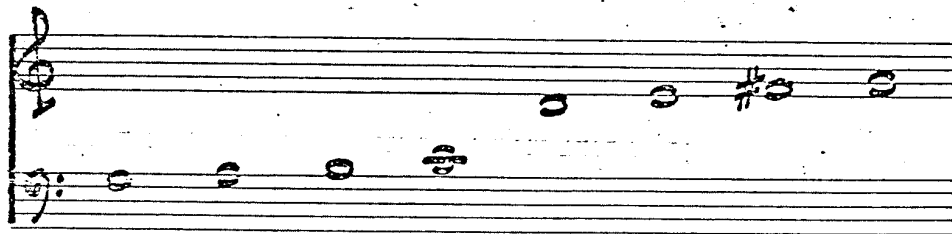


2. Bb TROMBONE --- is a non-transposing instrument (in spite of its name). Each note is written exactly as it sounds.

This note  played on the piano would sound the same as

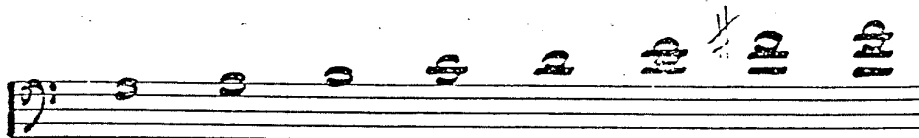
this note  played on the trombone.

This scale



played on the piano would sound the same as

this scale



played on trombone.

To FORDON 2004000 61 71 11000 11.0.

Here is a melodic line, first as it might appear in concert and then as it is written for trombone. Regardless of where the notes appear on the concert score, trombone parts are always written in the bass clef.

Ex. 2

Concert

Trombone

B. RANGES

Ex. 3

	CONCERT		TRANSPOSED	
	Possible	Practical	Possible	Practical
Bb Trumpet				
Bb Trombone				

NOTE: No definite, possible upper limit may be set for the trumpet or trombone, the range being dependent solely upon the proficiency of the performer. In any event, it is advisable to adhere to the given practical range unless you are personally familiar with the capabilities of each member of the brass section.

C. VOICING

The four-part brass section normally consists of:

- | | |
|-----|-------------|
| I | Bb trumpet |
| II | Bb trumpet |
| III | Bb trumpet |
| IV | Bb trombone |

Let us assume that we have prepared a four-part block harmonization in concert sketch form:

Ex. 4

The individual parts transposed according to the above voicing would appear as follows:

Ex. 5

I Bb Trumpet

II Bb Trumpet

III Bb Trumpet

I Trombone

An alternate combination of instruments for a four-part brass section would be:

- I Bb trumpet
- II Bb trumpet
- I Bb trombone
- II Bb trombone

Here is an example of a four-part block harmonization in open position with parts transposed according to the voicing previously described.

Ex. 6

(concert sketch)

Ex. 7 (transposed parts)

I Bb Trumpet

II Bb Trumpet

I Bb Trombone

II Bb Trombone

The five-part brass section would normally consist of:

- I Bb trumpet
- II Bb trumpet
- III Bb trumpet
- I Bb trombone
- II Bb trombone

D. FIVE-PART HARMONY

Since our work up to now has dealt exclusively with four-part writing, it is necessary at this time to discuss some of the techniques relating to five-part harmony if we are to work with a five-part brass section.

A simple five-part harmonization may be produced by doubling the original melody one octave below the lead.

Ex. 8

a. four-part harmony

b. five-part harmony (four-part plus doubled lead)

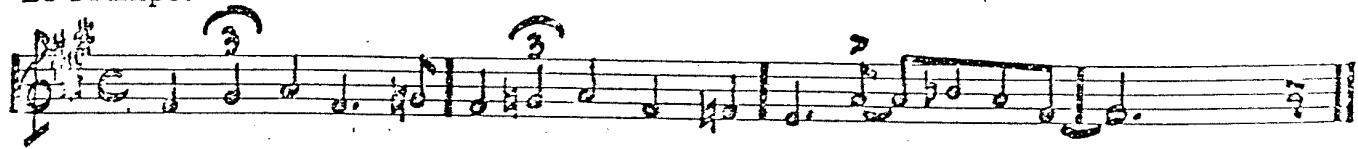
The transposed parts from the preceding example (EX. 8b) would appear as follows:

Ex. 9

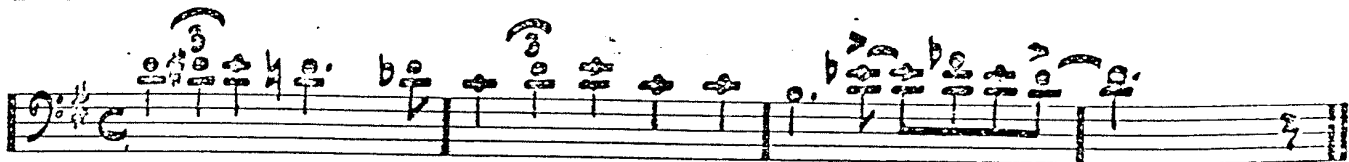
I Bb Trumpet

II Bb Trumpet

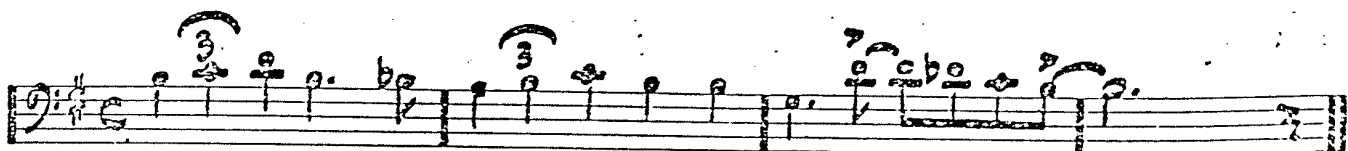
II Bb Trumpet



I Bb Trombone



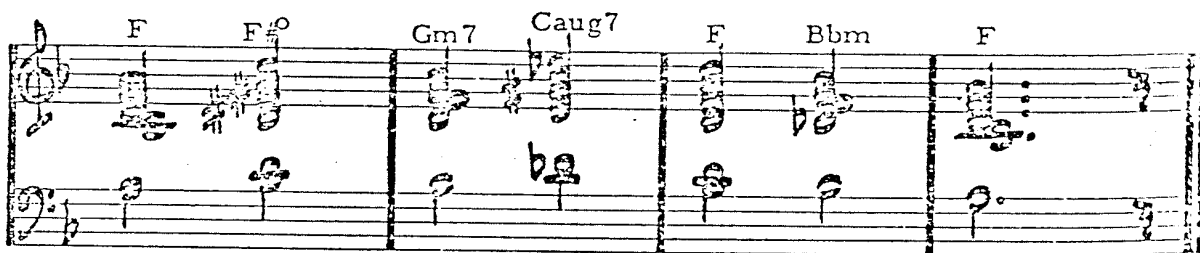
Bb Trombone



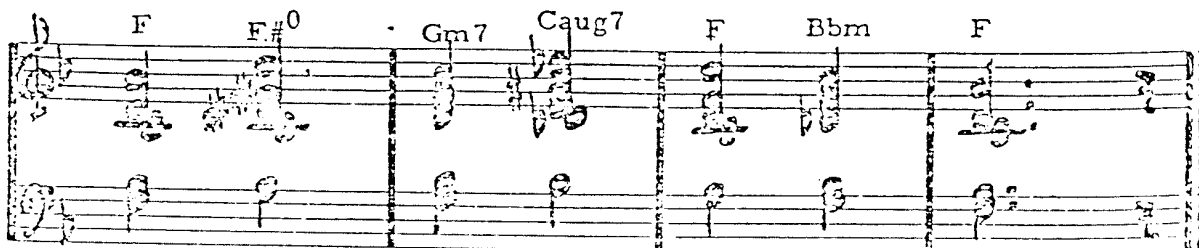
A five-part harmony in open position may be achieved by doubling the original melody one octave below the lead AND dropping the second voice down one octave as well.

Ex. 10

a. five-part harmony CLOSED



b. five-part harmony OPEN



E. BRASS SOLI

The principles of modern block harmonization as discussed in relation to the sax section may be effectively applied to the brass section as well. (See examples 4, 6, 8 and 10 of this lesson.) All of the previously mentioned approach techniques may be employed as well as all of the principles of improvisation covered in earlier lessons.

NOTE: When scoring a block harmonization for brass (either closed or open), it is best to keep the lead trumpet above Eb concert.



A brass soli (or background) scored any lower than this will result in a muddy and cumbersome sound.

When writing an improvised version of the original melody for the brass section, a rhythmic treatment is usually more effective than the smooth, flowing melodic style that is so effective in the sax section. Although it is true that brass may occasionally be written in this flowing "sax-like" style (just as saxes are occasionally used to provide a rhythmic, percussive "brass-like" effect), it is generally advisable to maintain some rhythmic interest in the brass soli.

Ex. 11 a. given melody

b. improvised melody for brass soli

F. BRASS BACKGROUNDS

Smooth sustained melodic lines are often effective in brass backgrounds, particularly when applied to slow-tempo ballads, waltzes, etc.. All principles of background writing as applied to the sax section still apply.

Following is an example of a brass background of this type.

Ex. 12

Cup Mute - *Ha 600grwa.*

The musical score for Ex. 12 is written for three parts: Brass Background, Alto Sax Solo, and Piano. The key signature is one sharp (F#) and the time signature is 4/4. The score is divided into two systems, each containing four measures.

Brass Background: The top staff of each system shows a melodic line for the brass section. The notes are generally sustained and smooth, fitting the description of the exercise.

Alto Sax Solo: The middle staff of each system shows a melodic line for the alto saxophone. The notes are also sustained and smooth, following the same general contour as the brass background.

Piano: The bottom staff of each system shows the harmonic accompaniment. The notes are sustained and smooth, providing a harmonic foundation for the other parts.

Chord Progressions:

- System 1:** G, Em7, Am7, D7, G, Em7, Bm7(b5), Eaug7(b9)
- System 2:** Am7, F7, Bm7, E7, Am7, D7, G

In the case of brass backgrounds to swing melodies, it is usually most effective to treat the brass section rhythmically rather than in the previously mentioned style. The use of rhythmic and/or percussive figures is especially effective.

Ex. 13

foxia.
2014
12/16/14

Medium Bright Swing

trass
ackground

ax
nison

ASSIGNMENT

1. Write an improvised version of each of the following melodies so that it would be effective as the lead of a brass soli. In cases where the melody line goes too low, transpose to a higher, more suitable key.

(a)

F 3 D7(b9) Gm7 C7 F Dm7 G7 3

Gm7 C7 Am7 D7(b9) Gm7 C7(b9) F

(b)

E7 Eb Fm7 E7 Eb

Bbm7 Eb7(b9) Ab Db7 Gm7 Gb7 Fm7 Bb7(b9)

(c)

Ab 3 Fm7 Bbm7 Eb7 Ab 3 Fm7

Bbm7 Eb7 Ab Fm7 Bbm7 Eb7 Ab Gb7 Ab

(d)

Chords for top staff: G#m7, C, G#m7, C, G#m7, C, Em7(b5), A#m7

Chords for bottom staff: Dm7, G7, Dm7, G7, E7, A7, D7, G7

2. Score each of the improvised melodies in Problem No. 1 for a five-part brass section (see examples 8b and 10b). Score at least two of the harmonizations in open position.

3. Transpose parts from each of the harmonizations in Problem No. 2 for:

- I Bb trumpet
- II Bb trumpet
- III Bb trumpet
- I Bb trombone
- II Bb trombone

4. Using each of the following melodies as a guide, set up concert scores as shown below.

Brass
Background

Given
Melody

SAX SOLI med swing

(a) Fm7 Bb7 Eb C7

Fm7 Bb7(b9) Eb

GUITAR SOLO slow 4

(b) F Gm7 Am7 Ab° Gm7 C7(b9) Am7(b5) D7

Gm7 C7(b9) Am7(b5) D7 Gm7 C7(b9) F

CLAR UNISON Mod^{to} Beguine

(c) F Eb7 F

Gm7 C7 3. F Gm7 C7 2. F Bbm F

GIRL VOCAL Med 4

(d) Am7 D7(b9) G E7(b9) Am7 D7(b9) Bm7(b5) E7

Am7 F7 G E7(b9) Am7 D7(b9) G

Cont.

It is important that you consider the character and feeling of each of the given melodies in deciding what type of background to use. Also, as you compose each background, try to imagine the sound of the given melody as played by the indicated instruments as well as the sound of the brass background. Use five-part harmony, either closed or open.

5. Using any standard tune of your choice, score a five-part brass soli in open position. Adapt the original melodic line in any way you choose and, if necessary, transpose the melody to a more suitable key before scoring the under voices.
6. Transpose parts from the score written for Problem No. 5 for five brass (three trumpets and two trombones).
7. Using any swing tune of your choice, write a five-part brass background. Picture the original melody being played by a unison sax section. (Note: Set up the score as described in Problem No. 4.)
8. Transpose parts from the above score for the regular five part brass section.

LESSON NO. 15

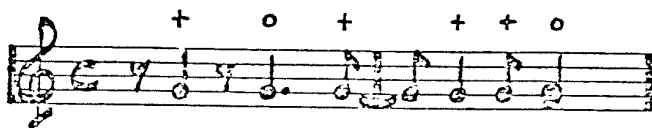
A. THE BRASS SECTION (cont.)

1. MUTING -- FAYX00 36YK (543000 000 0000)

In the event that you are not familiar with the mutes commonly used in the brass section, following is a brief description of each:

- a. Straight mute --- produces a thin metallic sound --- most effective in Latin-American style arrangements.
- b. Cup mute --- best all around mute in the brass section --- has soft metallic sound --- effective in both ballads and swing tunes.
- c. Harmon mute --- has soft, distant quality --- effective in medium high to high register only --- most common in trumpet section.
- d. Brass hat --- unlike other mutes, does not come into direct contact with the bell of the horn --- softens and mellows the sound almost to a French Horn timbre --- same effect often produced by blowing "in stand".
- e. Plunger --- primarily used to produce "open-closed" effect --- (listen to Glenn Miller records for excellent illustration of plunger work in the brass section) --- similar effect may be produced by using Brass hat or cupping hand over bell --- indicated as follows:

Ex. 1



+ = closed

o = open

NOTE: Avoid the use of mutes that are inserted directly into the bell (cup, straight, harmon, etc.) when writing in the low or medium-low register.

B. USE OF INNER VOICE TENSIONS IN OPEN POSITION

Whenever you wish to achieve a tenser and more modern sound in the brass or sax soli, the following principle may be applied:

"WHEREVER POSSIBLE, HI MAY BE SUBSTITUTED FOR LO IN THE SECOND VOICE (from the top) OF ANY OPEN VOICING."

Following is a listing of the most practical and best sounding voicings employing the preceding principle:

*								
Major:	3	5	5	Minor:	5	Minor 7th:	5	b7
	7	9	9		9		9	11
	5	6	7		6		b7	1
	1	3	3		b3		b3	5

Dominant 7th: 1 or 9 5 b7 b9 or #9 b13

13	9 (b9)	11	b13	b9
3	b7	9	3	b7
b7	3	5	b7	3

The preceding in musical notation would appear as follows:

Ex. 2

Major:

F

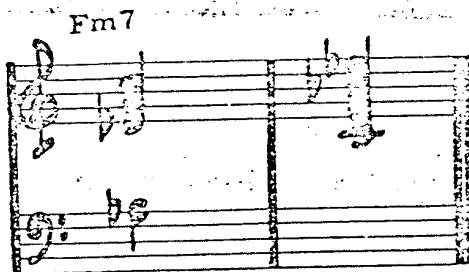
Minor:

Fm

Dom. 7th:

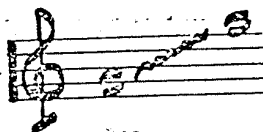
F7

Minor 7th:



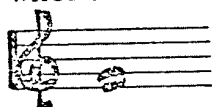
These voicings are generally most effective

when the lead voice lies between



concert.

NOTE: The preceding voicings should be used only where the lead voice goes no lower than



concert.

With voicing marked *, the lead voice may

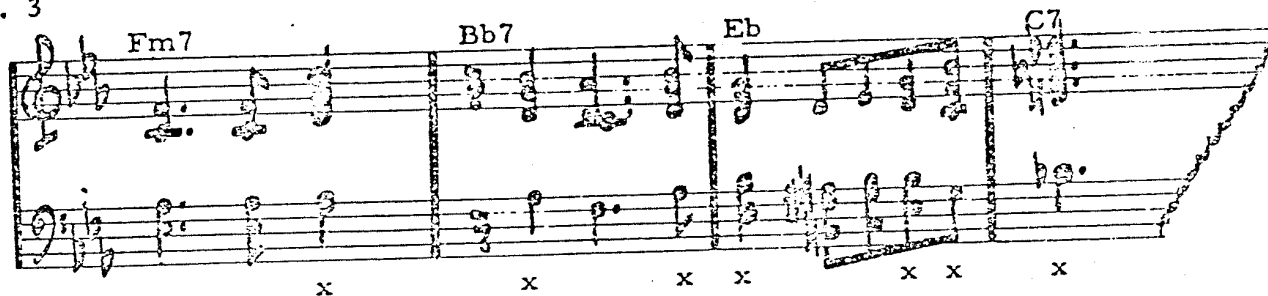
be as low as



concert.

Here is an example of a four-part sax soli in open position illustrating the usage of inner voice tensions:

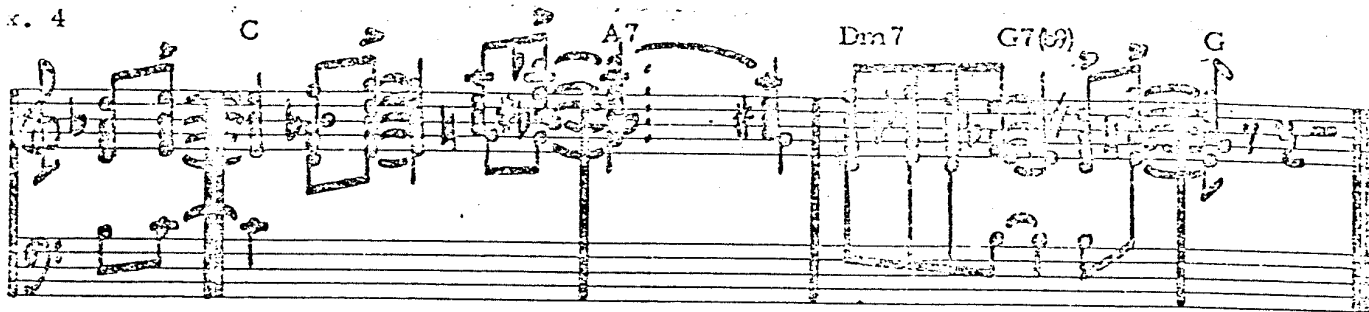
Ex. 3



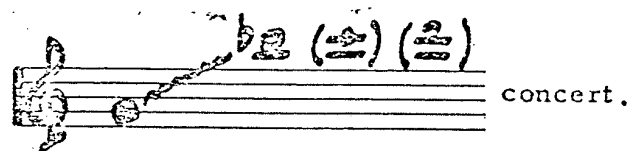
It is important that you understand that these open voicings containing inner voice tensions should be used only where good taste dictates. Do not feel that you must use inner voice tensions every time the possibility exists. Rather, familiarize yourself with these sounds and try to use them where you feel that their tense quality will be most effective.

In the following example, the given melody has been scored for a five part brass soli (four-part with doubled lead) in open position. Voicings employing inner voice tensions have been used where desired.

x. 4



NOTE: Five-part brass soli in open position (2nd dropped) is most effective when the lead voice is between:



C. THE FIVE-PART SAX SECTION

The most commonly used instrumentation in the five-part sax section is:

- I Eb Alto
II Eb Alto
III Bb Tenor
-IV Bb Tenor
V Eb Baritone

Προβλεψήματα
σε κλίμα και ανιχνή-
ση.

Either four-part, doubled lead in closed position; or four-part, doubled lead with second voice dropped, may be used with the above combination.

Following is an example of a five-part sax soli in open position. (Second voice dropped 8vb.)

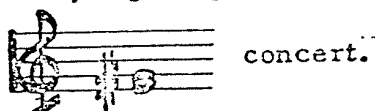
Ex. 5



Another popular voicing for the five-part reed section is as follows:

I	Bb Clarinet	Аноз уа ерорнен
II	Eb Alto	62 Куген Брау
III	Eb Alto	(Регистры)
IV	Bb Tenor	
V	Bb Tenor	

This particular voicing is most effective in closed position and in a fairly high register, with the lead clarinet written no lower than



It is also interesting to note that this particular sound is commonly associated with the Glenn Miller band as well as those bands which have adopted the basic Miller style; Ralph Flanagan, Tex Beneke, etc.

Following is an example of a five-part sax soli scored for the above instrumentation.

Ex. 6



ASSIGNMENT

1. Notate the chart of open voicings utilizing inner voice tensions in all keys. (See Ex. 2)
2. Score each of the following melodies for a four-part sax section (A, T, T, B). In each case use open position and utilize voicings containing inner voice tensions where desired. (See Ex. 3).

(a)

Exercise (a) consists of two staves of music. The first staff contains the following chords: F, Dm7, Gm7, C7, F, and G7(b9). The second staff contains: F, D7, Gm7, C7, A7, D7(b9), G7, and C7(b9). The melody is written in treble clef with a key signature of one flat (Bb).

(b)

Exercise (b) consists of two staves of music. The first staff contains the following chords: Am7, Cm, G, and E7. The second staff contains: Am7, Ab7, G, Cm, and G. The melody is written in treble clef with a key signature of two flats (Bb, Eb).

(c)

Exercise (c) consists of two staves of music. The first staff contains the following chords: C, A7, Dm7, G7, C, A7, Dm7, and G7. The second staff contains: C, A7, Dm7, G7, C, Bb7, and C. The melody is written in treble clef with a key signature of one flat (Bb).

(d)

Exercise (d) consists of two staves of music. The first staff contains the following chords: C7, F, F#° (F# diminished), Gm7, and C7. The second staff contains: Gm7, C7, C#7 (C# diminished), and F. The melody is written in treble clef with a key signature of one flat (Bb).

3. Compose a melodic improvisation based on each of the following melodies so that it would be suitable as the lead of a brass soli. Where necessary, transpose to a higher key since each of the brass solis is to be scored in open position.

a)

Chords for exercise a): Gm7, C7, F, Ab^o, Gm7, C7, Am7(b5), D7, Gm7, Gm7, C7, F, Eb7, F.

b)

Chords for exercise b): G, Em7, Am7, Am7, D7, Bm7(b5), E7, Am7, D7, G, Bb^o, Am7, D7, G.

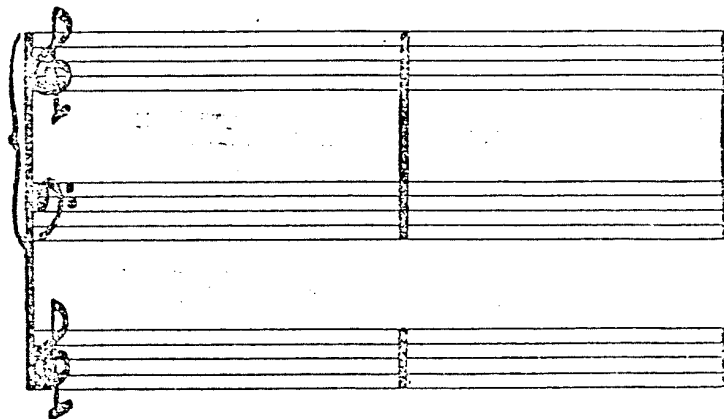
4. Score each of the improvised melodies from Problem No. 3 for five-part brass solis in open position. Again, apply the principles of inner voice tensions as described in this lesson.
5. Using melodies (a) and (b) from Problem No. 2, set up a concert score as indicated below:

trumpet solo
(given melody)

five-part sax
background
(closed or open)
A, A, T, T, E

6. Using melodies (c) and (d) from Problem No. 2, set up a concert score as shown below:

five-part brass
background
(closed or open)
(muted if desired)



sax unison
(given melody)

7. Transpose any standard tune of your choice to a higher key so that the melodic line will be suitable as the lead voice of a five-part clarinet lead reed section. Feel free to alter the original melodic line in any way you see fit.
8. Score the transposed melody from Problem No. 7 in closed position for:

- | | |
|-----|-------------|
| I | Bb Clarinet |
| II | Eb Alto |
| III | Eb Alto |
| IV | Bb Tenor |
| V | Bb Tenor |

LESSON NO. 16

At this point in the course we come to one of the most essential and least understood subjects in modern music ----Modern Chord Progression. In the course of the next few lessons you should achieve an excellent understanding of those principles which control present day harmonic progression.

You should ultimately be able to harmonize given melodic lines, correct "in-correct" chord changes and reharmonize basic chord progressions to suit your personal taste.

A. TERMINOLOGY.

For the purpose of this study, all chords will be named in relation to their position in the major key scale.

Let us assume that we are composing (or analyzing) a chord progression in the key of C Major:

Ex. 1



Diatonic (i.e., using scale tones only) seventh chords built on the scale degrees will assume the following structures:

Ex. 2



Non-diatonic chords may be indicated in a similar manner:

Ex. 3

Key of C major:

bVI Maj 7
bIII m7
#I dim
etc.

Ab Maj 7
Eb m7
C# dim

Wherever a Dominant seventh structure is used as a V7 chord (i.e., moves to another chord a fifth below), we will name the V7 in relation to its forward tendency. For example, C7 to F in the key of C would not be analyzed as I^{dom}7 to IV, but rather, as V7 of IV to IV. The symbol \curvearrowright will be used to indicate the resolution of any V7 chord, i.e., V7 of IV \curvearrowright IV.

Some additional examples of this point follow:

Ex. 4 Key of C Major:

B7 to Em	\curvearrowright <u>V7 of III</u> to III ^m
D7 to G7	\curvearrowright <u>V7 of V</u> to V7
A7 to D ^m 7 etc.	\curvearrowright <u>V7 of II</u> to II ^m 7

Following is an example of a simple chord progression outlined in the manner described and its appearance when related to a given key.

Ex. 5

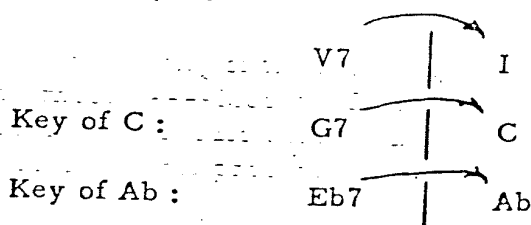
	I	V ^m 7	III ^m 7	V7	I	V7 of IV	IV	IV ^m	I	bVI7	I
	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /
Key of C :	C	A ^m 7	D ^m 7	G7	C	C7	F	F ^m	C	A ^b 7	C
Key of E ^b :	E ^b	C ^m 7	F ^m 7	B ^b 7	E ^b	E ^b 7	A ^b	A ^b ^m	E ^b	C ^b 7	E ^b
Key of A :	A	F [#] ^m 7	B ^m 7	E7	A	A7	D	D ^m	A	F7	A

B. PRINCIPLES OF MODERN HARMONY

1. ANY I CHORD MAY BE PRECEDED BY ITS V7. (Dominant Cadence)

This usually occurs over the bar line.

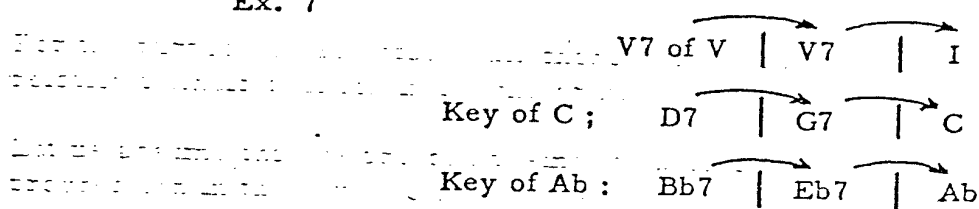
Ex. 6



2. ANY V7 MAY BE PRECEDED BY THE V7 OF V. (Extension of the dominant cadence.)

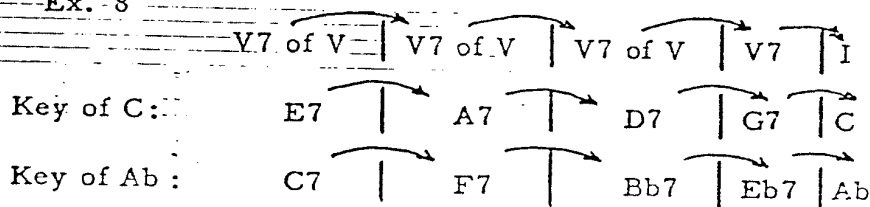
Again, this usually (but not always) occurs over the bar line.

Ex. 7



This same principle may be further extended as follows:

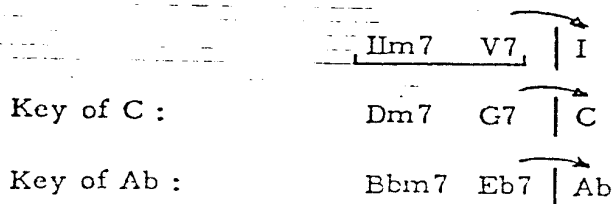
Ex. 8



3. ANY V7 MAY BE IMMEDIATELY PRECEDED BY THE RELATED IIIm7.

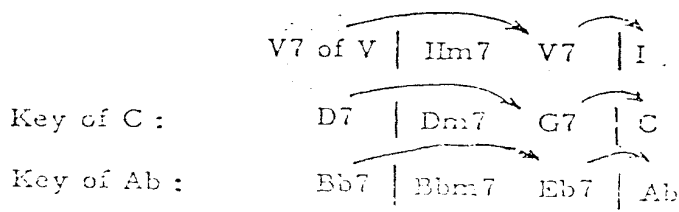
This usually occurs within the bar.

Ex. 9

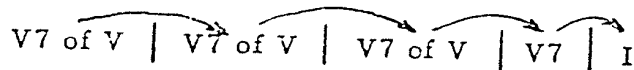


The use of the above does not affect the V7 of V relationship as established in Principle No. 2.

Ex. 10



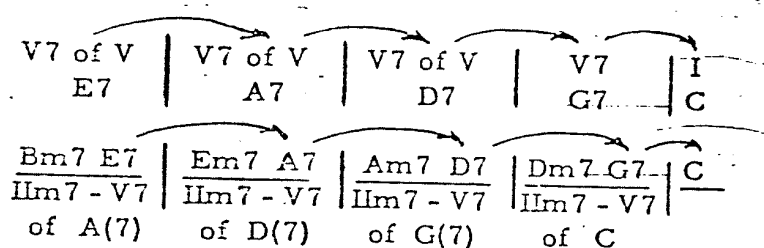
Using as a basis the progression:



This same principle may be developed as follows:

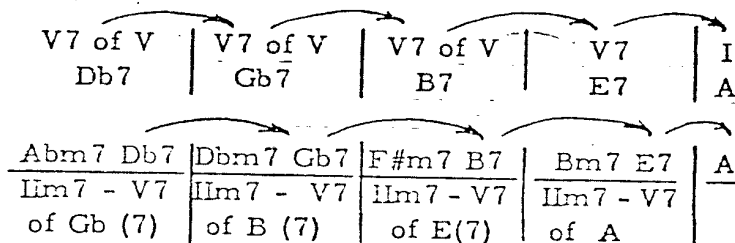
Ex. 11

Key of C:



Leading into the key of A, the preceding progression would appear as follows:

Ex. 12

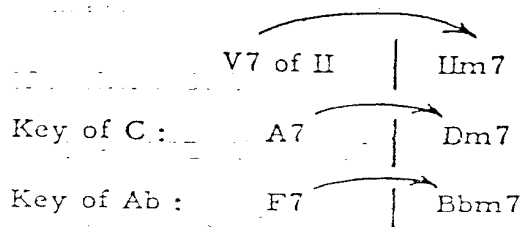


NOTE: Changing from sharps to flats is permissible, but always over the bar line rather than within the bar.

4. ANY IIIm7 MAY BE PRECEDED BY THE V7 OF II.

This usually occurs over the bar line.

Ex. 13



A further development of this principle when combined with those preceding would lead to the following result:

Ex. 14

(IIm7) V7 of II | (IIm7) V7 of II | (IIm7) V7 of II | (IIm7) V7 || I
 Key of C: $\frac{Abm7}{IIm7 - V7}$ $\frac{Db7}{of F\#(m7)}$ | $\frac{F\#m7}{IIm7 - V7}$ $\frac{B7}{of E(m7)}$ | $\frac{Em7}{IIm7 - V7}$ $\frac{A7}{of D(m7)}$ | $\frac{Dm7}{IIm7 - V7}$ $\frac{G7}{of C}$ || C
 Key of Ab: $\frac{Em7}{IIm7 - V7}$ $\frac{A7}{of D(m7)}$ | $\frac{Dm7}{IIm7 - V7}$ $\frac{G7}{of C(m7)}$ | $\frac{Cm7}{IIm7 - V7}$ $\frac{F7}{of Bb(m7)}$ | $\frac{Bbm7}{IIm7 - V7}$ $\frac{Eb7}{of Ab}$ || Ab

The preceding progressions may be more easily understood by realizing that ANY V7 chord, whether it be V7, V7 of V, V7 of II, etc...may be preceded by the related IIm7, i.e.....IIm7-V7 of...

Since the IIm7-V7 pattern plays such an important part in modern chord progression, it would be advisable at this point to familiarize yourself with this pattern in all keys.

	<u>IIm7</u>	<u>V7</u>	<u>*</u>
Ex. 15	Dm7	G7	C
	Ebm7	Ab7	Db
	Em7	A7	D
	Fm7	Bb7	Eb
	F#m7	B7	E
	Gm7	C7	F
	Abm7	Db7	Gb
	Am7	D7	G
	Bbm7	Eb7	Ab
	Bm7	E7	A
	Cm7	F7	Bb
	C#m7	F#7	B

* Major, Minor, Dominant 7th or Minor 7th

All of the principles discussed thus far may be intermingled in a harmonic progression with the forward tendency in each bar consisting of either the V7 of V or the V7 of II.

Ex. 16

Key of C:

(IIm7) V7 of V	(IIm7) V7 of II	(IIm7) V7 of V	(IIm7) V7
F#m7 B7	Bm7 E7	Am7 D7	Dm7 G7
IIm7 -- V7 of E (7)	IIm7 - V7 of A (m7)	IIm7 - V7 of G (7)	IIm7 - V7 of C

Following is another example of the result obtained by combining the V7 of V and the V7 of II in a chord progression.

Ex. 17

Key of C:

(IIm7) V7 of V	(IIm7) V7 of II	(IIm7) V7 of II	(IIm7) V7
C#m7 F#7	F#m7 B7	Em7 A7	Dm7 G7
IIm7 - V7 of B(7)	IIm7 - V7 of E(m7)	IIm7 - V7 of D(m7)	IIm7 - V7 of C

(At this point it would be advisable to complete Problem No. 1 of the lesson assignment.)

C. CHORD PATTERNS

A detailed analysis of the chord changes to many hundreds of popular and standard tunes has revealed the existence of certain definite harmonic patterns. Since these patterns occur so frequently, it is certainly advantageous to be able to identify them and apply them in all keys.

The value of a thorough knowledge of these patterns cannot be stressed too strongly. Sufficient familiarity with them will enable you to transpose or memorize the chord changes to any tune virtually at sight. Further, since you are dealing with those very same elements which go to make up the chord changes to most tunes, you should have no difficulty whatsoever in composing original chord progressions in the same style.

PATTERN #1

I VIm7 | IIm7 V7 ||

Key of C: C Am7 | Dm7 G7 ||
Key of Ab: Ab Fm7 | Bbm7 Eb7 ||

PATTERN #2

I #Idim | IIm7 V7

Key of C: C C#dim | Dm7 G7
Key of Ab: Ab A dim | Bbm7 Eb7

PATTERN #3

Key	I	bIIIdim	IIIm7	V7
Key of C:	C	Eb dim	Dm7	G7
Key of Ab:	Ab	B dim	Bbm7	Eb7

PATTERN #4

Key	V7 of V	IIIm7	V7	I
Key of C:	D7	Dm7	G7	C
Key of Ab:	Bb7	Bbm7	Eb7	Ab

PATTERN #5

Key	V7 of II(b9)	IIIm7	V7	I
Key of C:	A7(b9)	Dm7	G7	C
Key of Ab:	F7(b9)	Bbm7	Eb7	Ab

PATTERN #6

Key	I	V7 of IV	IV	IVm	I
Key of C:	C	C7	F	Fm	C
Key of Ab:	Ab	Ab7	Db	Dbm	Ab

Using only those techniques which have been discussed up to this point, it is possible to create an infinite number of musical and practical (though still very simple) chord progressions.

One further principle, however, must be known and applied; i.e., ANYTHING MAY FOLLOW THE "I" CHORD.

Following are some logical eight bar chord progressions along with an explanation of the function of each chord. Only materials contained in this lesson have been used.

Ex. 18

a. Key of C:

PATTERN #1

I	VIm7	IIIm7	V7
C	Am7	Dm7	G7

PATTERN #2

I	#Idim	IIIm7	V7
C	C#dim	Dm7	G7

PATTERN #6

I	V7 of IV	IV	IVm	I
C	C7	F	Fm	C

PATTERN #4

V7 of V	IIIm7	V7	I
D7	Dm7	G7	C

b. Key of C:

I	IIIm7	V7 of II
*C	F#m7	B7

IIIm7	V7 of II
Dm7	G7

PATTERN #4

I	V7 of V	IIIm7	V7	I
C	D7	Dm7	G7	C

(* Anything may follow the I chord)

c. Key of Eb :

PATTERN #3

IIm7 Em7	V7 Bb7	I Eb	bIIIdim Cbdim
-------------	-----------	---------	------------------

IIm7 Em7	V7 Bb7	I Eb	V7 of V G7	V7 of II C7	IIm7 Em7
-------------	-----------	---------	---------------	----------------	-------------

d. Key of G

PATTERN #2

I G	#Idim G#dim	IIm7 Am7	V7 D7
--------	----------------	-------------	----------

PATTERN #6

I G	V7 of IV G7	IV C	IVm Cm
--------	----------------	---------	-----------

PATTERN #3

I G	bIIIdim Bbdim	IIm7 Am7	V7 D7
--------	------------------	-------------	----------

PATTERN #5

I G	V7 of II E7(b9)	IIm7 Am7	V7 D7	I G
--------	--------------------	-------------	----------	--------

NOTE: It is possible in the course of a progression to establish a key other than the one indicated in the key signature. The following chord changes to "What's New?" effectively illustrate this point.

e. "What's New?" -- Key of C

V7 G7	* I C	Key of Ab	Key of C
		IIm7 Bbm7	V7 Eb7
		I *Ab	
I Cm	IIm7(b5) Dm7(b5)	V7 G7	I C
		V7 of V D7	V7 G7
		I C	

(* Anything may follow the I chord.)

ASSIGNMENT

1. Work out each of the following chord progressions in every key. (In each case work back from the I chord.)

Key of C:

IIIm7	V7 of V	IIIm7	V7 of V	IIIm7	V7 of V	IIIm7	V7	I
Bm7	E7	Em7	A7	Am7	D7	Dm7	G7	C

Key of C:

IIIm7	V7 of II	IIIm7	V7 of II	IIIm7	V7 of II	IIIm7	V7	I
Abm7	Db7	F#m7	B7	Em7	A7	Dm7	G7	C

Key of C:

IIIm7	V7 of V	IIIm7	V7 of V	IIIm7	V7 of II	IIIm7	V7	I
F#m7	B7	Bm7	E7	Em7	A7	Dm7	G7	C

Key of C:

IIIm7	V7 of V	IIIm7	V7 of II	IIIm7	V7 of V	IIIm7	V7	I
F#m7	B7	Bm7	E7	Am7	D7	Dm7	G7	C

Key of C:

IIIm7	V7 of II	IIIm7	V7 of V	IIIm7	V7 of V	IIIm7	V7	I
F#m7	B7	Em7	A7	Am7	D7	Dm7	G7	C

Key of C:

IIIm7	V7 of II	IIIm7	V7 of II	IIIm7	V7 of V	IIIm7	V7	I
C#m7	F#7	Bm7	E7	Am7	D7	Dm7	G7	C

Key of C:

IIIm7	V7 of II	IIIm7	V7 of V	IIIm7	V7 of II	IIIm7	V7	I
C#m7	F#7	Bm7	E7	Em7	A7	Dm7	G7	C

h.

Key of C:

IIIm7	V7 α V	IIIm7	V7 α II	IIIm7	V7 α II	IIIm7	V7	I
C#m7	F#7	F#m7	B7	Em7	A7	Dm7	G7	C

2. Work out Patterns #1, #2, #3, #4, #5 and #6 in all keys.
3. Compose three eight-bar progressions in every key using only those materials contained in this lesson. Explain the function of each chord used as in Example #18
4. Using any and all of the melodic techniques covered in the preceding lessons (approach notes, tensions, tension-resolve, delayed resolution, etc.) compose original melodic lines to any twelve of the progressions resulting from Problem #3.
5. Using any one of the original melodies composed for Problem #4 set up a concert score as indicated below.

Trumpet Solo

Sax background
(open or closed)
A, A, T, T, B

6. Again, using any other original melody from Problem #4, set up a concert score as described below.

Brass
Background
(3 trumpets)
(2 trombones)

Sax
Unison

LESSON NO. 17

PRINCIPLES OF HARMONIC PROGRESSION (cont'd)

A. SUBSTITUTE CHORDS

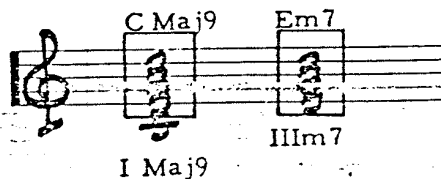
Substitute chords of one type or another may often be effectively employed where a more "tense" or more modern sound is desired. Needless to say, they should not be used indiscriminately, but rather to achieve a specific effect at a specific point in the harmonic progression.

Following is a description of the most commonly used substitutions.

1. **SUBSTITUTE FOR THE "I" CHORD.** "The III^m7 may be used as a substitute for the Major I chord."

The relationship of the III^m7 to the I chord may be noted in the following illustration.

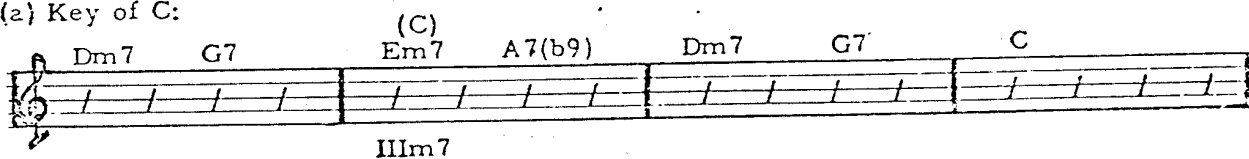
Ex. 1



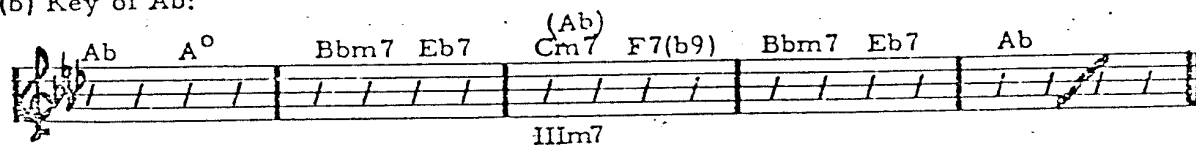
Observe the application of this principle to the examples:

Ex. 2

(a) Key of C:



(b) Key of A^b:



NOTE: This substitution is effective only in the middle of a progression and should not be used where the I chord is intended to signify a final cadence.

It should also be noted that it is almost always followed by some form of the V7 of II.

2. SUBSTITUTE FOR THE "IV_m" CHORD. The bVII7 may be used as a substitute for the IV_m.

Again, the derivation of this substitution may be noted in the following illustration:

Ex. 3

Application of this principle might appear as follows:

Ex. 4

(a) Key of C:

(b) Key of Eb:

3. SUBSTITUTE FOR THE "V7" CHORD. The bII7 may be used as a substitute for the V7 chord.

Notice that the third and seventh degrees (which establish the chord as a dominant seventh structure) are the same in each case.

Ex. 5

In the following examples are illustrated some of the many, many applications of this principle.

Ex. 6

(a) Key of C:

Diagram (a) shows a musical staff in the key of C. The sequence of chords is: C, (A7) Eb7, Dm7, (G7) Db7, and C. Below the staff, the first two measures are labeled "Subst V7 of II" and the next two measures are labeled "Subst V7".

(b) Key of Bb:

Diagram (b) shows a musical staff in the key of Bb. The sequence of chords is: Bb, (Bb7) E7, Eb, Ebm, and Bb. Below the staff, the first two measures are labeled "Subst V7 of IV".

(c) Key of G:

Diagram (c) shows a musical staff in the key of G. The sequence of chords is: G, (A7) Eb7, Am7, (D7) Ab7, and G. Below the staff, the first two measures are labeled "Subst (V7 of V)" and the next two measures are labeled "Subst V7".

Following is a reference chart illustrating all of the substitute chords described in this lesson.

Ex. 7

(a) Substitute I (IIIIm7)		(b) Substitute IVm (bVII7)		(c) Substitute V7 (bII7)	
original	substitute	original	substitute	original	substitute
C.....	Em7	Fm6.....	Bb7	G7	Db7
Db....	Fm7	Gbm6....	Cb7	Ab7	D7
D.....	F#m7	Gm6	C7	A7	Eb7
Eb....	Gm7	Abm6 ...	Db7	Bb7	E7
E.....	G#m7	Am6	D7	B7	F7
F	Am7	Bbm6....	Eb7	C7	Gb7
F#....	A#m7	Bm6	E7	Db7	G7
Gb ...	Bbm7	Cm6	F7	D7	Ab7
G	Bm7	Dbm6, ...	Gb7	Eb7	A7
Ab ...	Cm7	Dm6	G7	E7	Bb7
A	C#m7	Ebm6 ...	Ab7	F7.....	B7
Bb ...	Dm7	Em6	A7	Gb7.....	C7
B	D#m7				

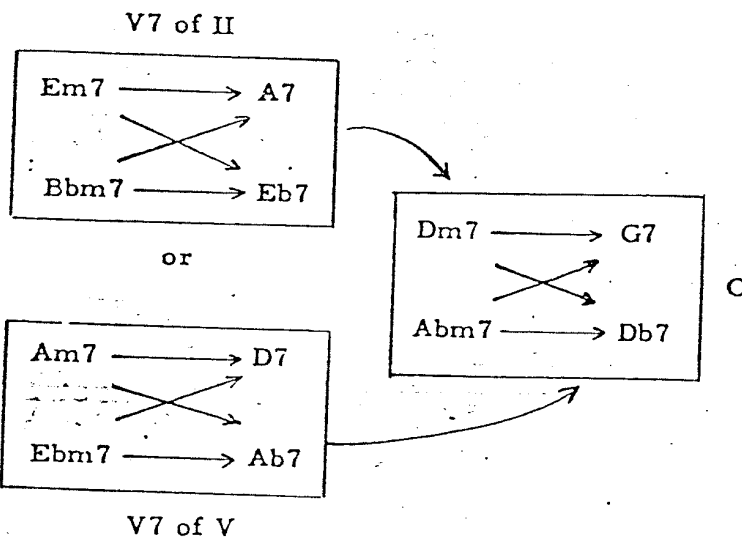
By preceding the V7 chord with either the original IIIm7 or the related IIIm7, the following variations are possible:

Ex. 8

Key of C :	Dm7	G7	C (or Gb)
	Dm7	Db7	C (or Gb)
	Abm7	Db7	C (or Gb)
	Abm7	G7	C (or Gb)

Note the varied possibilities for a four chord cadence utilizing this technique:

Ex. 9



Any combination of the above may be used providing that the forward motion is maintained.

Following are some examples of chord progressions employing all of the substitutions described in this lesson.

Ex. 10

(a) Key of C :

C (A7) Eb7 Dm7 G7 (C) Em7 A7(b9) Dm7 (G7) Db7
 Subst V7 of II IIIIm7 Subst V7
 C (C7) Gb7 F (Fm) Bb7 C Dm7 (G7) Db7 C
 Subst V7 of IV bVII7 Subst V7

(b) Key of F :

Staff 1: F, Bbm7, A7, Am7, Ab7, Gm7, Cb7. Substitutions: Subst V7dV, Subst V7dII, Subst V7.

Staff 2: F, (G7) Db7, Gm7, C7, (F) Am7, (D7) Ab7, (C7) Gm7, Cb7, F. Substitutions: Subst (V7dV), IIIIm7 Subst (V7dII), Subst V7.

(c) Key of Eb :

Staff 1: Fm7, (Bb7) Eb, Eb, Gm7, Cb7, Fm7, Bb7, Gm7, Cb7. Substitutions: Subst V7, Subst V7dII, IIIIm7 Subst V7dII.

Staff 2: Fm7, (Bb7) Eb, Eb, Elm7 Ab7, (D7) Gm7, (F#7) C7, (Bb7) Eb, Eb. Substitutions: Subst V7, Subst V7dII, Subst V7dII, Subst V7.

NOTE: Principle of the substitute dominant may be more easily mastered by remembering the following:

V7 RESOLVES DOWN A FIFTH.

SUBSTITUTE V7(bII7) RESOLVES DOWN A HALF-STEP.

B. VARIATIONS OF THE BASIC I - VI II - V PATTERN

The pattern "I - VIIm7 - IIIm7 - V7" is undoubtedly one of the most commonly used in popular harmonic progression. Following is a listing of the most practical variations of this basic chord pattern. Each of the variations has a slightly different character and a thorough familiarity with the sound of each will be important to you in deciding just which one to use in a given situation.

Ex. 11

a.	I		VIm7	IIIm7	**V7
b.	I		bIIIdim	IIIm7	**V7
c.	I		#Idim	IIIm7	**V7
d.	I		V7 of V	IIIm7	**V7
e.	I		sub. V7 of V	IIIm7	**V7
f.	I		V7 of II(b9)	IIIm7	**V7
g.	I		sub. V7 of II	IIIm7	**V7
h.	I	*IIIm7	IIIm7 bIIIdim	IIIm7	**V7
i.	I	*IIIm7	IIIm7 bIIIm7	IIIm7	**V7
j.	I	*IIIm7	IIIm7 V7 of II(b9)	IIIm7	**V7
k.	I	*IIIm7	IIIm7 sub V7 of II	IIIm7	**V7
(special case) l.	I		V7 of bVI	bVImaj7	sub. V7

- * IIIm7 may be omitted in each case
 ** Substitute V7 may be used where desired

The preceding list of variations would appear as follows in the key of C.

Ex. 12

a.	C		Am7		Dm7	G7
b.	C		Eb dim		Dm7	G7
c.	C		C# dim		Dm7	G7
d.	C		D7		Dm7	G7
e.	C		Ab7		Dm7	G7
f.	C		A7(b9)		Dm7	G7
g.	C		Eb7		Dm7	G7
h.	C	Dm7	Em7	Eb dim	Dm7	G7
i.	C	Dm7	Em7	Ebm7	Dm7	G7
j.	C	Dm7	Em7	A7(b9)	Dm7	G7
k.	C	Dm7	Em7	Eb7	Dm7	G7
l.	C		Eb7		Ab Maj7	Db7

More complex variations may be produced in patterns d., e., f., g. and l., by preceding the V7 chord in the first bar with the related IIIm7.

Ex. 13

1 IIm7 Subst IIm7 V7
 V7 of II

C. CADENCE

The term "cadence" is used to indicate the arrival of the harmonic progression at a point of rest (usually on the I chord).

The strength or finality of the cadence is determined by the character of the chords leading toward this point of resolution. Generally speaking, cadential motion may be classified according to the following forms:

1. SUB-DOMINANT CADENCE
2. SUB-DOMINANT MINOR CADENCE
3. DOMINANT CADENCE

1. The SUB-DOMINANT CADENCE is the least final and most subtle in feeling of the three possible forms. It may be expressed in any of the following ways :

Ex. 14

IV to I
IIm7 to I

*IV7 to I

NOTE: * Special case - - used primarily in blues, or to establish "blues" feeling.

Ex. 15

Key of C :
F to C
Dm7 to C

VARIATIONS OF THE BASIC : F7 to C

2. The SUB-DOMINANT MINOR CADENCE has a stronger tendency toward resolution than the sub-dominant, and is somewhat more modern in feeling. The sub-dominant minor cadence may be represented as:

Ex. 16

IVm IVm to I
I

IIm7(b5) to I

bVII7 to I

Possibilities for sub-dominant minor cadence would appear as follows:

Ex. 17

Key of C :

Fm to C

Dm7(b5) to C

Bb7 to C

3. DOMINANT CADENCE, which is the strongest and most final in feeling is the familiar form most commonly associated with the term "cadence"!

Dominant cadence may be achieved through:

Ex. 18

V7 to I

bII7 to I

Key of C :

G7 to C

Db7 to C

There are also several less commonly used forms of sub-dominant and sub-dominant minor cadence which bear mentioning at this time. Although not usually found in basic chord progression, these variations may often be effectively applied in reharmonization or in the composition of original chord progressions.

SUB-DOMINANT CADENCE (less commonly used form)

Ex. 19

VII7 to i

Key of C :

B7 to C

SUB-DOMINANT MINOR CADENCE (less commonly used forms)

Ex. 20

bVI Maj7 to I
 bVI7 to I
 bII Maj7 to I
 The strength of each of the cadences of a particular key depends on the character of the Key of C:
 following forms:
 Abmaj7 to C
 Ab7 to C
 Dbmaj7 to C

Different cadential tendencies may be used in combination in leading toward the I chord. Any combination may be used providing that forward motion is maintained by using these tendencies in order of their relative strength. This order may be described as follows:

SUB-DOMINANT --- SUB-DOMINANT MINOR --- DOMINANT --- TONIC

Following is a listing of all of the possible cadential forms that could result from the above outline:

- a. SUB-DOMINANT ----- TONIC
- b. SUB-DOMINANT MINOR ----- TONIC
- c. DOMINANT -- TONIC
- d. SUB-DOMINANT -- SUB-DOMINANT MINOR ----- TONIC
- e. SUB-DOMINANT ----- DOMINANT -- TONIC
- f. SUB-DOMINANT MINOR -- DOMINANT -- TONIC
- g. SUB-DOMINANT -- SUB-DOMINANT MINOR -- DOMINANT -- TONIC

To illustrate further, let us assume that we have selected as our cadential form:

SUB-DOMINANT --- SUB-DOMINANT MINOR --- TONIC

Referring to the possibilities for each tendency as described earlier in this lesson, we find that this particular cadence may assume the following appearance:

Ex. 21

IVIVm..... I
or;
IIIm7..... IIIm7(b5)...I
or;
IIIm7 bVII7.....I
or;
IV..... bVII7.....I
etc., etc.

Let us assume that we have selected as our cadence form:

SUB-DOMINANT -- SUB-DOMINANT MINOR -- DOMINANT -- TONIC

Here are some of the possible variations that might result:

Ex. 22

IIIm7... IIIm7(b5).... V7. I
or;
IV.....IIIm7(b5).... V7.....I
or;
IV bVII7.....V7..... IIIm7
or;
IIIm7....bVII7..... bII7.....I
etc., etc.

It should by now be apparent to you that literally hundreds of varied and interesting cadential progressions may be evolved through the use of this system. Most of these forms are currently in common use in the basic chord changes to standard and popular tunes; all may be effectively used in reharmonization or in the composition of original chord progressions.

Remember, however, that forward motion must be maintained.

ASSIGNMENT

1. (a) Analyze each of the following chord progressions according to the techniques described in Lesson #16.

(b) Reharmonize each progression by employing substitute chords as described in this lesson.

(1)

Chord progression 1:

Line 1: C, C7, F, Fm

Line 2: C, A7, Dm7, G7, C, Fm, C

(2)

Chord progression 2:

Line 1: Gm7, C7, F, D7(b9), Gm7, C7, F

Line 2: Am7, D7(b9), Gm7, C7, F, Bbm, F

(3)

Chord progression 3:

Line 1: G, Ab^o, Am7, D7, G, G7, C, Cm

Line 2: G, Bb^o, Am7, D7, G, C, G

(4)

Chord progression 4:

Line 1: Fm7, Bb7, Bbm7, Eb7, Ab, B^o

Line 2: Bbm7, Eb7, Ab, Db, Ab

(5)

Bb Gm7 Cm7 F7 Bb Db° Cm7 F7

Bb Bb7 Eb Ebm Bb Ebm Bb

(6)

D F#m7 B7 Em7 A7 D D7

G Gm D B7(b9) E7 A7 D

(7)

Eb Am7 D7 G Gm7 C7

F Fm7 Bb7 Eb Ab Eb

2. Work out all variations of the basic I, VI, II, V, pattern in all keys.
3. Work out all possibilities for SUB-DOMINANT cadence in all keys.
4. Work out all possibilities for SUB-DOMINANT MINOR cadence in all keys.
5. Work out all possibilities for DOMINANT cadence in all keys.

6. Working in all keys, show one possibility for each of the cadence forms listed on page 9.
7. Using all of the materials contained in lessons sixteen and seventeen, compose two eight-bar progressions in every key.
8. Using any standard tune of your choice as a guide, work out the following:

- a. Transpose to a key suitable for a female

vocalist.



- b. Score a suitable background (to the vocal lead) for a five sax section (A, A, T, T, B) using closed and/or open position.

LESSON NO. 18

PRINCIPLES OF HARMONIC PROGRESSION (cont'd)

A. REPETITION OF THE II^m7 - V7

In the course of a harmonic progression, the II^m7 - V7 of the key may be repeated without affecting the basic forward motion of the progression.

Ex. 1

(a) Key of C:

(b) Key of A^b :

II ^m 7	V7		II ^m 7	V7		I	II ^m 7	V7		II ^m 7	V7		I	subst.
D ^m 7	G7		D ^m 7	G7		C	B ^b m7	E ^b 7		B ^b m7	A7		A ^b	

B. PASSING DIMINISHED CHORDS

Very often it is possible to progress from one "diatonic" chord to another through a "passing" diminished chord. In each case, the function of the diminished chord is to provide smoother and stronger linear motion between the two diatonic chords.

Following is a listing of the most commonly used applications of the passing diminished chord :

1.	I	Idim	I
2.	V7	Vdim	V7
3.	I	#Idim	II ^m 7
4.	II ^m 7	#II ^m dim	I ⁶ ₃ (3rd in the bass)
5.	I ⁶ ₃	bIII ^m dim	II ^m 7
6.	IV	#IV ^m dim	I ⁶ ₄ (5th in the bass)
7.	I ⁶ ₄	bV ^m dim	IV

To be certain that the foregoing is perfectly clear, here is an illustration showing the appearance of each of the preceding patterns in the key of C. Note the chromatic linear motion achieved through the use of the passing diminished chords.

Ex. 2

(a)

Chords: C, Cdim, C

(b)

Chords: G7, Gdim, G7

(c)

Chords: C, C#dim, Dm7

(d)

Chords: Dm7, D#dim, C6

(e)

Chords: C6, Eb°, Dm7

(f)

Chords: F, F#°, C6

(g)

Chords: C6, Gb°, F

To illustrate further, here is a short theme in which the chord progression effectively employs several forms of the passing diminished chord.

Ex. 3



C. DECEPTIVE CADENCE

The normal tendency for any V7 chord is to progress to another chord located a fifth below.

Ex. 4

G7 to C ; G7 to C7 ; G7 to Cm7 ; etc...
 5th 5th 5th
 down down down

When a V7 chord is followed by some root motion other than that of down a fifth (or down a half step if it is a substitute dominant) the result is known as a "deceptive cadence".

Deceptive cadences may generally be classified as being either:

- a. non-modulating ; or
- b. modulating

For the present we shall be concerned exclusively with the first type, i. e., those forms of deceptive cadence which under normal conditions usually continue to a conventional cadence in the same key.

The commonly used forms of "non-modulating" deceptive cadence are listed below. In each case, those chords which normally follow the deceptive cadence are also indicated.

Ex. 5

1. $\boxed{V7 \text{ to } IIIm7} \quad \boxed{V7 \text{ of } II} \quad IIIm7 \quad V7 \quad | \quad I$
2. $\boxed{V7 \text{ to } IIIm7(b5)} \quad \boxed{V7 \text{ of } II(b9)} \quad IIIm7 \quad V7 \quad | \quad I$
3. $\boxed{V7 \text{ to } "V7 \text{ of } V \text{ of } V \text{ of } V"} \quad \boxed{V7 \text{ of } V \text{ of } V} \quad \boxed{V7 \text{ of } V} \quad V7 \quad | \quad I$
(III7)
4. $\boxed{V7 \text{ to } VIIm(7)} \quad \boxed{V7 \text{ of } V} \quad IIIm7 \quad V7 \quad | \quad I$

Example #5 would appear as follows in the key of C ;

Ex. 6

- | | | |
|---------------------------------------|--------------------|--------------|
| 1. $\boxed{G7} \quad \boxed{Em7}$ | $A7 \quad Dm7$ | $G7 \quad C$ |
| 2. $\boxed{G7} \quad \boxed{Em7(b5)}$ | $A7(b9) \quad Dm7$ | $G7 \quad C$ |
| 3. $\boxed{G7} \quad \boxed{E7}$ | $A7 \quad D7$ | $G7 \quad C$ |
| 4. $\boxed{G7} \quad \boxed{Am7}$ | $D7 \quad Dm7$ | $G7 \quad C$ |

Although lessons to follow will continue with a further discussion of the techniques of modern harmonic progression, we have by this time progressed far enough to be able to identify and analyze the chord changes which might be used with many standard and popular tunes.

It should be clearly understood at this time that there is no such thing as the correct set of chord changes to a tune. Many different harmonic variations may be used with a given melody depending upon the harmonic style desired (commercial; modern; etc.).

In the following examples, the most commonly used basic changes have been indicated.

Ex. 7

(a) "DON'T BLAME ME"

C	Bb7	A7	Dm7(b5)	G7	C
/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /
I	V7 of V subst	V7 of II	IIIm7(b5)	V7	I
Dm7(b5)	G7	Em7(b5)	A7	Dm7	G7
/ / / /	/ / / /	/ / / /	/ / / /	/ / / /	/ / / /
IIIm7(b5)	V7	IIIm7(b5)	V7 of II	IIIm7	V7
deceptive cadence					I

(Ex. 7 cont'd)

(b) "IMAGINATION"

Staff 1: C7, F, F#⁰, Gm7, C7, F, Am7(b5), D7
 Staff 2: V7, I, #Idim, IIm7, V7, I, IIm7(b5), V7 of II
 Staff 3: Gm7, C7, F, Ab7, Gm7, C7
 Staff 4: IIm7, V7, I, V7 of II subst., IIm7, V7

(c) "TIME WAS"

Staff 1: G, E7(b9), Am7, D7, G, G7, C, Cm
 Staff 2: I, V7 of II, IIm7, V7, I, V7 of IV, IV, IVm
 Staff 3: C, Bb⁰, Am7, D7, G, F7, G
 Staff 4: I, bIII⁰, IIm7, V7, I, bVII7, I sub-dominant minor cadence

(d) "I MAY BE WRONG"

Staff 1: Eb, Bbm7, Eb7, Ab, Db7
 Staff 2: I, IIm7, V7 of IV, IV, IVm(subst)
 Staff 3: Eb, F7, Fm7, Bb7, Eb
 Staff 4: I, V7 of V, IIm7, V7, I

D. ADDITIONAL APPROACH TECHNIQUES

In conjunction with the work on harmonic progression, we now return to the technique of scoring with a discussion of some additional methods of harmonizing approach notes.

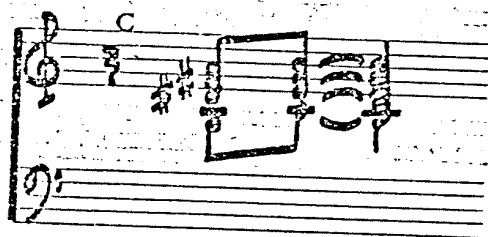
These additional approach techniques should be used primarily where the conventional approach note harmonizations do not produce a satisfactory result.

It will necessarily take a certain amount of experimentation to determine just where each type will be most effective, but the interesting results that may be obtained from these various approach harmonizations more than justify the effort.

1. INDEPENDENT LEAD (six types)

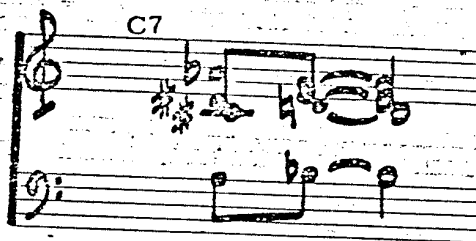
- a. Lead moves up one whole step
Lower voices move up one half step

Ex. 8



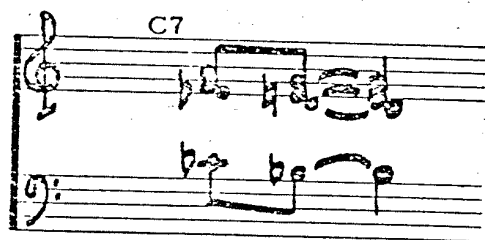
- d. Lead moves down one half step
Lower voices move up one half step

Ex. 11



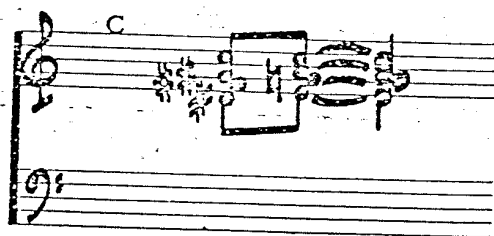
- b. Lead moves down one whole step
Lower voices move down one half step

Ex. 9



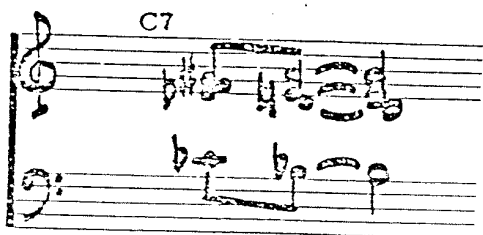
- e. Lead repeats
Lower voices move down one half step

Ex. 12



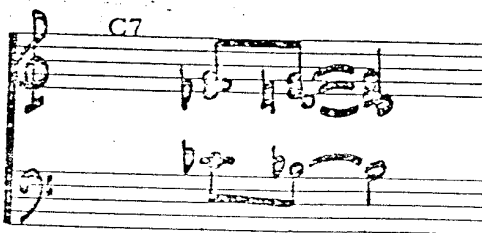
- c. Lead moves up one half step
Lower voices move down one half step

Ex. 10



- f. Lead repeats
Lower voices move up one half step

Ex. 13



In using any of the foregoing forms of independent lead, care should be taken to see that the resulting approach chord forms some logical structure. Do not use an independent lead where the approach chord does not form a logical structure.

Following are some examples illustrating both correct and incorrect usages of independent lead.

Ex. 14

(a) Lead moves up one half step

Lower voices move down one half step

C (BAD) (GOOD)

(b) Lead moves down one half step

Lower voices move up one half step

C7 (BAD) (GOOD)

2. DIATONIC APPROACH

As the name implies, only scale tones are used in the diatonic approach. Each note of the chord is approached scalewise, with all voices moving in the same direction as the lead.

Ex. 15

C

Diatonic approach is usually most effective when it assumes the following appearance:

APPROACH → CHORD

(a) Sub-dominant → Tonic

(b) Tonic → Sub-dominant

Shown below are examples of some effective uses of the diatonic approach.

Ex. 16

(a)

(b)

NOTE: Any inversion of the above forms may be used.

3. PARALLEL APPROACH

In the parallel approach, all voices move in the same direction and exactly the same interval as the lead, i.e., parallel.

Ex. 17

4. DOMINANT APPROACH

To use this type of approach, simply harmonize the approach note with some altered form of V7 of the chord being approached. A dominant approach into a C chord (or C7, Cm, Cm7, etc.) would consist of some altered form of G7; a dominant approach into any type of Bb chord would be produced by using an altered form of F7.

Ex. 18

(a) Em7 $\text{F7}(\text{b}5, \text{b}9)$ Bbm7

(b) C $\text{G7}(\text{\#}5, \text{b}9)$ C

In order to achieve the most effective result, it is essential that the approaching V7 be used in something other than its original form. Any of the following may be effectively used:

- V7 (b5)
- V7 (b9)
- V7 (#5)
- V7 (#9)
- V7 (b5, b9)
- V7 (#5, b9)
- V7 (#5, #9)

Following are several examples of the application of the dominant approach in the block harmonization of a given melody.

Ex. 19

C (X) Am7 (X) Dm7 (X) G7 (X) C (X) (X)

NOTE:

In relating the new approach methods described in this lesson to previously discussed approach techniques, it should be noted that most "diminished chord" harmonizations of scalewise approach notes, are simply special applications of the dominant approach. (V7 b9) Also, chromatic approach notes harmonized "chromatically in all voices" may be considered to be applications of the parallel approach.

Following is an illustration of the four-part block harmonization of a given melody employing these new approach sounds. Naturally this particular example is somewhat overdone for purposes of illustration.

Ex. 20

IL Independent lead
di Diatonic approach
par ... Parallel approach
dom .. Dominant approach

The musical score for Ex. 20 is written in G major, 4/4 time, and consists of three systems of four-part block harmonization. The notation includes various approach techniques and chord symbols:

- System 1:**
 - Measures 1-2: Fm7 (dm) Bb7
 - Measures 3-4: Eb (di) (par) (IL) (dom) (dom)
 - Measures 5-6: Fm7 (dom) Bb7
- System 2:**
 - Measures 1-2: Gm7(b5) C7 (IL)
 - Measures 3-4: Fm7(di) A7m (IL)
 - Measures 5-6: Eb (par) IL C7
- System 3:**
 - Measures 1-2: Fm7 (par) (par) (dom) Bb7 (par)
 - Measures 3-4: Eb (IL)

In view of the varied approach techniques described in this as well as in former lessons, it should become increasingly obvious to you that there is no single "best" method of harmonizing a given melody. As in the case of the selection of the basic harmonic progression itself; style, instrumentation and taste will all be determining factors.

More and more your taste, based on your increasing knowledge and experience, will guide you in your selections and you will find yourself objectively using a particular technique because you are able to associate it with a specific sound.

ASSIGNMENT

1. Notate variations of the passing diminished chord in all keys, similar to Ex. 2.
2. Work out the four forms of deceptive cadence described in the this lesson in all keys. (See Ex. 6)
3. Analyze each of the following chord progressions which might be used with the standard tunes indicated. (See Ex. 7)

(a) "TALK OF THE TOWN"

Chord progression for "TALK OF THE TOWN":

F Ab^o Gm7 C7 F F#m7 Bb Eb7 F E7

Chord progression for "TALK OF THE TOWN" (continued):

Eb7 D7 G7 Gm7 C7

(b) "BUT BEAUTIFUL"

Chord progression for "BUT BEAUTIFUL":

G Ab^o Am7 Bb^o G₃⁶

Chord progression for "BUT BEAUTIFUL" (continued):

Bm7(b9) E7 A7 A7 Am7 D7 Bm7 Bb^o

Chord progression for "BUT BEAUTIFUL" (continued):

Am7 D7 G Em7 A7 Am7

Chord progression for "BUT BEAUTIFUL" (continued):

D7

(c) "CYNTHIA'S IN LOVE"

Fm7 Bb7(b9) Eb Fm7 Gm7 Gb° Fm7

Bb7 Eb Db7 C7 Fm7

(d) "BLUE ROOM"

F Ab° Gm7 C7 F D7(b9) Gm7 C7 F F7

Bb Eb7 F G7 Gm7 C7

(c) "THERE'S NO YOU"

F Bbm F Dbm7 Gb7 F

Am7 Ab° Gm7 C7

(f) "MOONGLOW"

Eb Ebm Bb C7 Cm7

F7 Bb⁶₃ Db° Cm7Db° Eb⁶₃

(g) "I UNDERSTAND"

F#m7 F7 E7 A7 Am7 D7 G Am7 (G⁹) Bm7 E7

Am7 D7 G

(h) "GONE WITH THE WIND"

Chord progression for "Gone with the Wind":

Row 1: Fm7 Bb7 Eb C7(b9) Fm7 Bb7 Eb Am7 D7

Row 2: G E7(b9) Am7 D7 G (EbMaj9) Gm7 Gb°

Row 3: Fm7 Bb7 Eb Ebag7 Cm7(b5) C7 Fm7

Row 4: Db7 Bb7

4. (a) Compose one eight bar chord progression in every key, employing any and all of the harmonic techniques described in lessons 16, 17 and 18.
- (b) Show the analysis of each progression as in Problem #3.
5. Work out three practical examples of each of the six types of independent lead. (See Examples 8 through 13)
6. Notate in all keys the applications of the diatonic approach chord that have been described in this lesson. (See Ex. 16)
7. Complete a block harmonization of the following melody, using some form of dominant approach at each point marked "x".

Melody for block harmonization:

Staff 1: Am7 D7 G Bb° Am7 D7 Bm7(b5) E7

Staff 2: Am7 D7 G A7 Am7 D7 G

Points marked "x" for dominant approach: x, x, x, x, x, x, x, x

8. Work out a four-part block harmonization of each of the following given melodies. Employ any of the additional approach methods described in this lesson wherever you feel they may be effective. Indicate each as in Ex. 20.

(a)

Chord symbols: C7, Fm7, Bb7, Gm7, C7, Fm7, Bb7, Gm7(b5), C7, Fm7, Db7, Gm7, C7, Fm7, Bb7, Eb.

(b)

Chord symbols: D7, Am7, D7, G, E7, Am7, D7, Dm7, G7, C, Cm, Bm7, E7, Am7, D7, G.


(c)

Chord symbols: C, Am7, Dm7, G7, C, Am7, Dm7, E7, Am7, Am(Maj7), Am7, D7, Dm7, G7, C.

(d)

Chord symbols: F, Gm7, C7, F, Bbm7, Eb7, Ab, Am7, D7, G, Gm7, C7.

1. **Identifikasi Masalah**
 2. **Pengumpulan Data**
 3. **Penyusunan Laporan**
 4. **Pengujian**
 5. **Penyempurnaan**
 6. **Pengemasan**
 7. **Pengiriman**
 8. **Penggunaan**
 9. **Pengawasan**
 10. **Pengendalian**
 11. **Pengukuran**
 12. **Pengelolaan**
 13. **Pengembangan**
 14. **Pengelolaan**
 15. **Pengembangan**
 16. **Pengelolaan**
 17. **Pengembangan**
 18. **Pengelolaan**
 19. **Pengembangan**
 20. **Pengelolaan**
 21. **Pengembangan**
 22. **Pengelolaan**
 23. **Pengembangan**
 24. **Pengelolaan**
 25. **Pengembangan**
 26. **Pengelolaan**
 27. **Pengembangan**
 28. **Pengelolaan**
 29. **Pengembangan**
 30. **Pengelolaan**
 31. **Pengembangan**
 32. **Pengelolaan**
 33. **Pengembangan**
 34. **Pengelolaan**
 35. **Pengembangan**
 36. **Pengelolaan**
 37. **Pengembangan**
 38. **Pengelolaan**
 39. **Pengembangan**
 40. **Pengelolaan**
 41. **Pengembangan**
 42. **Pengelolaan**
 43. **Pengembangan**
 44. **Pengelolaan**
 45. **Pengembangan**
 46. **Pengelolaan**
 47. **Pengembangan**
 48. **Pengelolaan**
 49. **Pengembangan**
 50. **Pengelolaan**
 51. **Pengembangan**
 52. **Pengelolaan**
 53. **Pengembangan**
 54. **Pengelolaan**
 55. **Pengembangan**
 56. **Pengelolaan**
 57. **Pengembangan**
 58. **Pengelolaan**
 59. **Pengembangan**
 60. **Pengelolaan**
 61. **Pengembangan**
 62. **Pengelolaan**
 63. **Pengembangan**
 64. **Pengelolaan**
 65. **Pengembangan**
 66. **Pengelolaan**
 67. **Pengembangan**
 68. **Pengelolaan**
 69. **Pengembangan**
 70. **Pengelolaan**
 71. **Pengembangan**
 72. **Pengelolaan**
 73. **Pengembangan**
 74. **Pengelolaan**
 75. **Pengembangan**
 76. **Pengelolaan**
 77. **Pengembangan**
 78. **Pengelolaan**
 79. **Pengembangan**
 80. **Pengelolaan**
 81. **Pengembangan**
 82. **Pengelolaan**
 83. **Pengembangan**
 84. **Pengelolaan**
 85. **Pengembangan**
 86. **Pengelolaan**
 87. **Pengembangan**
 88. **Pengelolaan**
 89. **Pengembangan**
 90. **Pengelolaan**
 91. **Pengembangan**
 92. **Pengelolaan**
 93. **Pengembangan**
 94. **Pengelolaan**
 95. **Pengembangan**
 96. **Pengelolaan**
 97. **Pengembangan**
 98. **Pengelolaan**
 99. **Pengembangan**
 100. **Pengelolaan**

(e) 

(f) Dm7 G7 C F#m7 F7 E Em7 A7



D Dm7 G7 C Eb7 Dm7 G7 C



LESSON NO. 19

A. As previously stated, some key other than the main key of the composition may be established in the course of a chord progression. One of the commonest and most effective changes is achieved by establishing the relative minor key, i. e., that minor key that has the same signature as the relative major key.

EX. 1

<u>Major key</u>	<u>Relative Minor Key</u>
C Major	A Minor
Ab Major	F Minor
D Major	B Minor

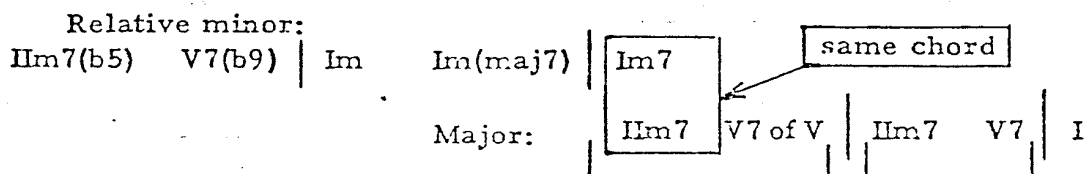
The minor key is established by using:

IIIm7(b5) V7(b9) Im

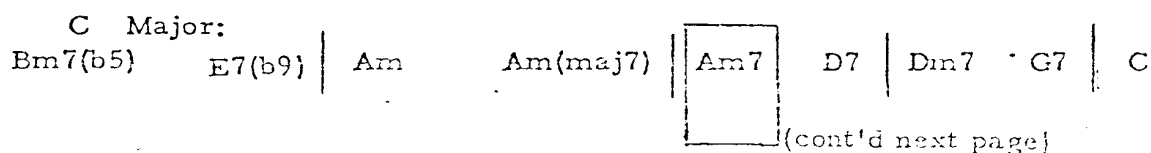
Ex. 2

C Major (A Minor)
Bm7(b5) E7(b9) Am
Ab Major (F Minor)
Gm7(b5) C7(b9) Fm
D Major (B minor)
C#m7(b5) F#7(b9) Bm

A smooth transition back to the major key is achieved by using the Im as a pivot chord as follows:



Ex. 3



(Ex. 3 - cont'd)

Ab Major:

Gm7(b5) C7(b9) | Fm Fm(maj7) | Fm7 Bb7 | Bbm7 Eb7 | Ab

D Major:

C#m7(b5) F#7(b9) | Bm Bm(maj7) | Bm7 E7 | Em7 A7 | D

Following are two eight-bar chord progressions further illustrating the application of this principle:

Ex. 4

F Major:

| F / Dm7 / | Gm7 / C7 / | F / / / | Em7(b5) / A7(b9) / |
| Dm / Dm(maj7) / | Dm7 / G7 / | Gm7 / C7 / | F / / / ||

G Major:

| Am7 / / / | D7 / / / | G / / / | F#m7(b5) / B7(b9) / |
| Em / Em(maj7) / | Em7 / A7 / | Am7 / D7 / | G / / / ||

B. FORM

Thus far we have applied the principles of harmonic progression to single eight-bar phrases only. These same principles, however are still valid in analyzing or constructing the chord progression to a complete tune.

For purposes of this study, we shall discuss the two forms most commonly used in song construction (although there are other variations).

	A^1	A^2	B	A^3
a.	8 bars	8 bars	8 bars	8 bars
b.	A^1	B	A^2	C
	8 bars	8 bars	8 bars	8 bars

In type "a." above, A^1 , A^2 and A^3 would be virtually the same, (except for cadential variation in the last two bars of each) while the B theme, also called the "bridge", "channel" or "release", would provide melodic and/or harmonic contrast.

Examples of this (type "a.") construction may be found in tunes such as:

"I'M IN THE MOOD FOR LOVE"
 "I COVER THE WATERFRONT"
 "EVERYTHING HAPPENS TO ME"
 "ONCE IN A WHILE"
 ETC., ETC.....

The equally common A¹, B, A², C structure (b.) may be found in the construction of tunes such as:

"DEEP PURPLE"
 "EMBRACEABLE YOU"
 "PENNIES FROM HEAVEN"
 "BUT BEAUTIFUL"
 ETC., ETC.....

It should be understood that the techniques of song construction (actually an involved study in itself) cannot be completely explored in this course. To gain a further understanding of harmonic progression as applied to song structure, it will be necessary for you to devote considerable time to the analysis of popular and standard tunes. (See examples 5 and 6, and Problem #1 of this lesson assignment.)

Ex. 5 A¹ A² B A³

"MOOD FOR LOVE"

A¹

Eb	Fm7	Fm7	Bb7	Eb
I	IIIm7	V7	I	

Gm7 Gb⁰ Fm7 Fm7 Bb7 Gm7 C7(b9) Fm7 Eb7(b9)

IIIm7 bIIIm⁰ IIIm7 IIIm7 V7 IIIm7 V7 IIIm7 V7

A²

Eb	Fm7	Fm7	Bb7	Eb
I	IIIm7	V7	I	

Gm7 Gb⁰ Fm7 Fm7 Bb7 Eb

IIIm7 bIIIm⁰ IIIm7 IIIm7 V7 I

B

Fm7	Bb7	Eb	C7(b9)	Fm7	Bb7	Eb
IIIm7	V7	I	V7 II	IIIm7	V7	I

Am7(b5) D7(b9) Gm Cm7 F7 Fm7 Bb7

IIIm7 V7 Key of Gm I IIIm7 V7 of V IIIm7 V7

Eb Fm7 Fm7 Bb7 Eb

I IIIm7 V7 I

Gm7 Gb7 Fm7 Fm7 Bb7 Eb

IIIm7 bIII7 IIIm7 IIIm7 V7 I

Ex. 6 A¹ B A² C
"LAURA"

A¹ Am7 Db(b9) G G

IIIm7 V7 Key of G I I

Gm7 C7(b9) F F

IIIm7 V7 Key of F I I

B Fm7 Bb7(b9) Eb Eb

IIIm7 V7 Key of Eb I I

Am7(b5) D7(b5) D7 G Bm7(b5) E7(b9)

IIIm7 V7 Key of G I IIIm7 V7 of II

A² Am7 D7(b9) G G

IIIm7 V7 Key of G I I

Gm7 C7(b9) F F

IIIm7 V7 Key of F I I

C Dm7(b5) G7 C C

IIIm7 V7 Key of C I I

D7(b9) G7 C C

V7 of V V7 I I

NOTE: A thorough discussion of the "blues-type" twelve bar construction will be included in a later lesson.

C. DECEPTIVE CADENCE

The following forms of deceptive cadence would not normally be found in the chord progression to a standard or popular tune but, rather, would be used to create a special harmonic effect for purposes of modulation or variation in the final cadence.

1.	<u>V7</u>	to	<u>bVIMaj7</u>	(I)
Key of C:	G7	"	AbMaj7	(C)
Key of Eb:	Bb7	"	CbMaj7	(Eb)
2.	<u>V7</u>	to	<u>bIIMaj7</u>	(I)
Key of C	G7	"	DbMaj7	(C)
Key of Eb	Bb7	"	EMaj7	(Eb)

NOTE: Where the deceptive cadence is to be followed by a modulation into another key, there is no need to return to the "I" chord of the original (as in parentheses above).

3. Modulating Deceptive Cadence

- a. Establish a strong melodic cadence on any one of the following degrees of the I chord:

1, 3, 5, 6, 7, 9

- b. Consider this note to be either the ninth or the scale eleventh of some minor seventh chord.

- c. Assume this minor seventh chord to be a IIm7 ... and continue on to the related V7.

- d. Cadence directly to the I chord established by this $\text{IIm7} - \text{V7}$, or progress as desired to any other key. (See Ex. 7)

Ex. 7

Example 7 displays several harmonic progressions in G major and D minor, each consisting of four measures. The notation includes chord symbols above the notes and a '3' in a circle indicating a triplet of eighth notes in the first measure of each progression.

- (a) $\text{Dm7} - \text{G7} - \text{C}$
- (b) $\text{Dm7} - \text{G7} - \text{Bbm7}$
- (c) $\text{Dm7} - \text{G7} - \text{Bbm7} - \text{Eb7}$
- (d) $\text{Dm7} - \text{G7} - \text{Bbm7} - \text{Eb7} - \text{Ab}$

Below these, two alternative progressions are shown, each preceded by 'or:'

- or: $\text{Dm7} - \text{G7} - \text{Bbm7} - \text{Eb7} - \text{Apm7} - \text{Db7} - \text{Gb}$
- or: $\text{Dm7} - \text{G7} - \text{F\#m7} - \text{B7} - \text{E}$

The final progression is also preceded by 'or:'

- or: $\text{Dm7} - \text{G7} - \text{Fm7} - \text{Bb7} - \text{Eb}$

D. COMPOSING INTRODUCTIONS AND MODULATIONS

All of the techniques of harmonic progression and melodization discussed in these lessons may be applied to the construction of introductions and modulations.

One harmonic factor that all introductions and modulations will have in common is that the final chord or chords must form some sort of cadence into the first chord of the chorus.

1. INTRODUCTIONS (most commonly four bars in length, but may be two, four, six or eight bars long.)

Generally speaking, introductions may be classified as being either thematic, i.e., based on the material contained in the tune itself; or non-thematic, i.e., based on new material not contained in the body of the tune.

It is virtually impossible to present an objective cover-

age of the writing of non-thematic introductions since so many variations are possible.

To be certain that the principle is clear however, following are some examples of non-thematic introductions.

Ex. 8

(a) C Eb° Dm7 G7 Em7 A7 Dm7 G7(b9) C

(b) Gm7 Gb7 Fm7 E7 A Fm7 Bbaug7 Eb

(c) G E7(b9) Am7 D7 G Am7 Bm7 Bb7 Am7 Ab7 G

Three musical staves labeled (a), (b), and (c). Each staff shows a sequence of chords and a corresponding melodic line. Staff (a) starts with C, Eb°, Dm7, G7, Em7, A7, Dm7, G7(b9), and ends with C. Staff (b) starts with Gm7, Gb7, Fm7, E7, A, Fm7, Bbaug7, and ends with Eb. Staff (c) starts with G, E7(b9), Am7, D7, G, Am7, Bm7, Bb7, Am7, Ab7, and ends with G.

Thematic introductions (the most commonly used type) may be based on any rhythmic, melodic or harmonic motif contained in the arrangement or in the original melody. Again, countless variations are possible in constructing this type of introduction, but it is interesting to note that many are based on some sort of sequential development.

Following are examples of thematic introductions to "I'm In The Mood For Love".

Ex. 9

(a) C Dm7 G7 Em7 A7 Dm7 G7 C

(b) Dm7 G7 Gm7 C7 F Eb7 D7 G7 C

(c) Dm7 G7 * F#m7 B7 E Dm7 G7 C

Three musical staves labeled (a), (b), and (c). Each staff shows a sequence of chords and a corresponding melodic line. Staff (a) starts with C, Dm7, G7, Em7, A7, Dm7, G7, and ends with C. Staff (b) starts with Dm7, G7, Gm7, C7, F, Eb7, D7, G7, and ends with C. Staff (c) starts with Dm7, G7, F#m7, B7, E, Dm7, G7, and ends with C. There is an asterisk (*) above the F#m7 chord in staff (c).

* modulating deceptive cadence

Needless to say, the style of the introduction should compliment the style of the arrangement by establishing the mood and character of the music to follow.

Ex. 10

(a) Bright Swing - "Dancing On The Ceiling"

Two staves of music in 4/4 time. The first staff contains the notes F, Gm7, C7, Am7, Dm7, Gm7, and C7. The second staff contains the notes F, Gm7, C7, Am7, Ab7, Gm7, C7, and F. The notes are written in a rhythmic pattern that suggests a bright swing feel.

(b) Beguine - "Besame Mucho"

Two staves of music in 3/4 time. The first staff contains the notes Dm, Dm, Em7(b5), A7, and Dm. The notes are written in a rhythmic pattern that suggests a beguine feel.

(c) Slow Waltz - "Our Waltz"

Two staves of music in 3/4 time. The first staff contains the notes C, Ab7, Dm7, and G7(b9). The notes are written in a rhythmic pattern that suggests a slow waltz feel.

2. MODULATIONS The primary consideration in constructing any modulation is to provide an interesting transition from one key to another. As in the case of introductions, modulations may be based on either thematic or non-thematic material.

There are, of course, many ways in which this transition may be accomplished, and countless variations of the following examples would be possible. Be sure to consider these examples as a starting point for your thinking, rather than an attempt at a complete coverage of the subject of modulation.

Ex. 11

(a) "PENNIES FROM HEAVEN" C to Eb

Two staves of music in 4/4 time. The first staff contains the notes Dm7, Dm7, G7, C, and Dm7. The second staff contains the notes D#0, C#7, Fm7, Eb7(b9), and Eb. The notes are written in a rhythmic pattern that suggests a modulation from C to Eb.

(b) "MOONLIGHT IN VERMONT" Eb to Bb
(no extra bars)

modulation

(c) "LAURA" C to Db (starting chord Bbm7) (last two bars omitted)

* modulating deceptive cadence

(d) "OVER THE RAINBOW" Eb to Gb
(two extra bars)

modulation
Eb

(e) "DEEP PURPLE" F to G
(no extra bars)

NOTE: Principles of Harmonic Progression as discussed in Lessons 16 through 19 have been used exclusively in constructing the modulations and introductions used in this lesson.

ASSIGNMENT

1. Analyze the chord changes to each of the standard tunes included at the end of the assignment. (see Ex. 5 and Ex. 6.)
2. Compose one eight-bar progression in every key, establishing the relative minor key at some point in the progression. (see Ex. 3)
3. Notate the following deceptive cadences in every key.

(a) V7 to bVIMaj7 (I)

(b) V7 to bIIMaj7 (I)

4. Utilizing the principle of modulating deceptive cadence as described in this lesson, construct a modulation of any length from the key of C into each of the eleven other keys. Compose both melody and chord progression for each of the eleven modulations.
5. Compose a thematic introduction of any desired length (melody and chords) to each of the following standard tunes. (see Ex. 9)

- | | |
|-------------------------------|-----------------------------|
| a. You Are Too Beautiful | g. September Song |
| b. Can't Help Lovin' That Man | h. Somebody Loves Me |
| c. Body and Soul | i. Someone To Watch Over Me |
| d. I Only Have Eyes For You | j. I Cover The Waterfront |
| e. How High The Moon | k. Jeepers Creepers |
| f. Deep Purple | l. Gone With The Wind |

NOTE: In the event that you are not familiar with any of the foregoing tunes, simply substitute tunes of your own choice.

6. Compose both the melody and the chord progression for twelve non-thematic introductions (one in every key) in each of the following styles. These introductions may be of any desired length. (see Ex. 10)

- (a) Waltz
- (b) Slow Ballad
- (c) Bright or Medium Swing
- (d) Beguine (or any other Latin-American beat)

7. Construct a modulation of any desired length leading from:
(listed on next page.)

(Problem No. 7 cont'd)

- | | | | | | |
|-------|----|----|-------|----|----|
| a. C | to | Ab | g. Gb | to | Bb |
| b. Bb | to | Db | h. Db | to | Gb |
| c. Ab | to | A | i. F | to | Bb |
| d. Eb | to | G | j. A | to | Eb |
| e. D | to | B | k. Bb | to | C |
| f. G | to | F | l. G | to | Eb |

NOTE; Any of the techniques of melodization and chord progression discussed in these lessons may be used. The modulations may be either non-thematic or thematic (if based on specific tunes).

8. Using any standard tune of your choice:

- a. transpose the melody to a key suitable for a five-part brass soli in open position.
- b. compose a percussive, rhythmic improvisation of the original melody.
- c. score for:

- | | |
|-----|-------------|
| I | Bb Trumpet |
| II | Bb Trumpet |
| III | Bb Trumpet |
| I | Bb Trombone |
| II | Bb Trombone |

NOTE: In scoring Problem No. 8, try to make use of inner voice tensions as discussed in Lesson No. 15.

(Progressions for Problem No. 1)

(a) "I CAN'T GIVE YOU ANYTHING BUT LOVE"

Progression (a) is written in G major and consists of 12 staves of music. The chords are as follows:

- Staff 1: G, G, Bb^o, Am7, D7
- Staff 2: G, G, Em7, Am7, D7
- Staff 3: G, G7, C, C7, B7, Bb7
- Staff 4: A7, A7, Am7, D7
- Staff 5: G, G, Bb^o, Am7, D7
- Staff 6: G, G7, C, C
- Staff 7: C, Cm, G, A7
- Staff 8: Am7, D7, G, Am7, G

(b) "I 'LL NEVER SMILE AGAIN"

Progression (b) is written in F minor and consists of 3 staves of music. The chords are as follows:

- Staff 1: Gm7, Gb^o, Fm7, Fm7, Bb7, Eb, Fm7
- Staff 2: Gm7, Gb^o, Fm7, Fm7, Bb7, Eb, Fm7
- Staff 3: Gm7, C7(b9), Fm7, Bb7, Eb, Fm7, Bb7

"I'LL NEVER SMILE AGAIN" (cont.)

Eb D7 G Am7 Bm7(G₃⁶) F7(b9) Fm7
 Bb7 Gm7 Gb^o Fm7 Fm7 Bb7 Eb Fm7
 Gm7 Gb^o Fm7 Fm7 Bb7 Eb
 Eb7 Ab Db7 Eb
 C7 Fm7 Fm7 Bb7 E Maj7 Eb

(c) "I REMEMBER YOU"

G C#m7 F#7 G Dm7 G7
 C Am7(b5) D7(b9) G Am7 D7
 G C#m7 F#7 G Dm7 G7
 C Am7(b5) D7(b9) G Dm7 G7
 C F#m7 B7 E F#m7 B7
 E Em7 A7 D F#7

"I REMEMBER YOU" (cont.)

Three staves of musical notation for "I REMEMBER YOU" (cont.). Each staff contains four measures of music with various chords written above them.

Staff 1: G, C#m7, F#7, G, Bm7(b5), E7

Staff 2: Am7, Am7(b5), Ab7, G, Am7, Bm7, Am7

Staff 3: G, Em7, Am7, D7, G, F7, G

(d) "I'LL STRING ALONG WITH YOU"
(re-harmonized)

Eight staves of musical notation for "I'LL STRING ALONG WITH YOU" (re-harmonized). The first staff includes a treble clef and a key signature of one flat. Each staff contains four measures of music with various chords written above them.

Staff 1: Eb, Fm7, Gm7, Fm7, Eb, Gaug7, C7

Staff 2: Fm7, Bb7, Fm7, Bb7, Gm7 C7(b9), Fm7, Eb7(b9)

Staff 3: Eb, Fm7, Gm7, Fm7, Eb, Gaug7, C7

Staff 4: Fm7, Bb7, Fm7, Bb7, Eb, Eb7

Staff 5: Ab, Abm, Eb, F7(b9), Bb7, Bb°

Staff 6: Eb, Eb7, Ab, Db7, Eb, F7, Bb aug7

Staff 7: Eb, Fm7, Gm7, Fm7, Eb, Gaug7, C7

Staff 8: Fm7, Bb7, Fm7, Bb7, Eb

LESSON NO. 20

A. The principles of chord progression as discussed in the past few lessons may be applied effectively in the "re-harmonization" of a given chord progression. Reharmonization of a given progression may be necessary or desirable for either or both of the following reasons:

- a. to correct chord changes that for one reason or another are incorrect on the existing piano part or lead sheet.
- b. to provide harmonic motion through the use of added chords, or harmonic interest through the application of substitute chords.

Both of these principles have been considered in the reharmonization of the following chord progressions. In each case, the basic chord has been taken from the printed piano copy. Needless to say, the melodic line has been carefully considered in constructing the reharmonized progression.

To derive the maximum benefit from these examples;

- a. study each carefully, being certain that the logic behind each of the reharmonizations is clear to you.
- b. play (or have someone else play) the melody, first with the original chord progression, and then with the reharmonized chord progression. Listen closely to the sound of each and try to associate the harmonic techniques involved with the resulting musical sound.

Ex. 1

(a) "LOVE LETTERS"

original

original	reharmonization	original	reharmonization
G	G	Em	Em
G	G	Em7	Em7
Am7	Cdim	G	G
Am7	D7(b9)	Gmaj7 Am7	Em7 F7

Em6	F#7	Bm	E7
Em6	F#7	Bm	Bm7 E7

Am	Ddim	Am	Cm D7
Am7	E7(b9)	Am7	F7 D7

G	G	Em	Em
G	G	Em7	Em7

Am7	Cdim	G7	G7
Am7	D7(b9)	G7	Dm7 G7

C	Cm	G	Gdim
C	F7	G	Bb°

Am7	Am7 D7	G	G
Am7	D7(9#11) D7	G	G

(b) "OVER THE RAINBOW"

original

Eb	Cm	Gm	Eb7	Ab	Eb
reharmonization	Eb Am7(b9) D7	Gm7	E7	Eb7	Ab
				Adim	Eb ⁶ Eb7

Ab	Abm	Eb	C7	F7	Bb7	Eb
Ab	Db7	Eb	Db7 C7	F7	Fm7 Bb7	Eb Fm7 E7

Eb	Eb	Fm7	Bb7	Eb
Eb	Eb Fm7 Gm7 C(b9)	Fm7	Bb7	Eb Fm7

Eb	Bb7	Eb	Cdim	F7
Gm7 Fm7 Eb	Eb	Gb ^o	Bb7	

Bb7	Eb	Cm	Gm	Eb7	Ab
Fm7 Bb7	Eb	Ab7	Gm7 Cb7 Fm7 E7 Eb7	Ab	Adim

Eb	Ab	Abm	Eb	C7	F7	Fm	Bb7
Eb ⁶ Bbm7 Eb7	Ab	Db7	Eb	Eb7 C7 Gb7	F7	Fm7	Bb7

Eb
Eb

(c) "YOU ARE TOO BEAUTIFUL"

Dm7 G7	Em7 A7	Dm7 G7	C
Dm7 G7	Em7 A7(b9)	Dm7 G7(b9)	C Eb7
Dm7 Fm7 Ddim C	Cdim	1. Dm7 G7	C
Dm7 G7(b9)	C Em7 Ebdim	Dm7 G7	Em7 A7(b9)
2. D7 G7	C	F Cdim	C Gdim
Dm7 G7	C C7	F F#dim	C ⁶ A7(b9)
Dm7 G7	C	Dm6 E7	Am Aug
Dm7 G7	C	Bm7(b5) E7	Am Am(Maj7)
Am7 D7	G7	Dm7 G7	Em7 A7
Am7 D7	Dm7 G7	Dm7 G7	Em7 A7(b9)
Dm7 G7	C	Dm7 Fm7 Ddim	C Ddim Am
Dm7 G7(b9)	C Em7(b5) A7	Dm7 G7(b9)	C E7(b9) Am7

D7	G7	C
/ / / / /		
D7	G7	C
/ / / / /		

original (d) "I MARRIED AN ANGEL"

F7	C7	F	Gm7	C7	F
/ / / / /					
reharmonization					
F	Gm7	Am7	D7(b9)	Gm7	C7
/ / / / /					
F Am7 Abm7					
/ / / / /					

Gm7	C7	F	D7	Gm7	C7	1. F
/ / / / /						
Gm7	C7	Am7	D7	Gm7	C7	A7 D7 G7 C7
/ / / / /						

2. F	Dm7	G7	C	Dm	G7
/ / / / /					
F	Em7	Ebm7	Dm7	G7	C
/ / / / /					
A7(b9) Dm7 G7					
/ / / / /					

C	Cm7	F7	Bb	F	G7
/ / / / /					
C	Cm7	F7	Bb	Dm7	G7
/ / / / /					

Handwritten musical notation for guitar, consisting of three systems of two staves each. The notation includes various chords and rhythmic markings.

System 1:

- Staff 1: C7, F, C7, F, Gm7, C7
- Staff 2: C7, Gb7, F, Gm7, Am7, D7(b9), Gm7, C7

System 2:

- Staff 1: F, Gm7, C7, F, D7, Gm7, C7
- Staff 2: F, D7(b9), Gm7, C7, Am7, Ab7, Gm7, C7

System 3:

- Staff 1: F
- Staff 2: F

(e) "FOGGY DAY"

Handwritten musical notation for guitar, consisting of three systems of two staves each. The notation includes various chords and rhythmic markings.

System 1:

- Staff 1: C7, F, Ebm, Gm7, C7, F
- Staff 2: C7, F, Ab7, Gm7, C7, F

System 2:

- Staff 1: Fm6, G7, C7, F, F7, Bb
- Staff 2: Dm7(b5), G7, Gm7, C7, F, Cm7, F7, Bb

System 3:

- Staff 1: Bb6, F, D7, G7
- Staff 2: Eb7, F, Am7(b5), D7(b9), G7

2.

Chord progressions shown in the musical notation:

- System 1: C7, F7, F7, Bb
- System 2: Bbm, F, Bb6, F, Bb6, F, G7
- System 3: Eb7, F, Gm7, F⁶, Gm7, F, Dm7
- System 4: Bb, C7, F, F, Gm7, C7, F, F

B. "BLUES"

Over a period of time the term "blues" has come to represent almost any twelve-bar harmonic phrase regardless of its resemblance to the simple traditional blues outline.

In this discussion it is not our purpose to analyze the historical development of the "blues" nor to establish strict definitions which will enable us to determine whether or not a certain twelve bar phrase may or may not be accurately defined as "blues".

Rather, using the traditional blues pattern as a guide, we shall try to develop related twelve-bar phrases using the techniques of harmonization and reharmonization as discussed in previous lessons.

The basic traditional blues chord progression consisted of:

Ex. 2

Chord progression for Ex. 2:

- Staff 1: C, C, C, C, F, F
- Staff 2: C, C, G7, G7*, C, C

* or F7

Following are several examples of variations on the original blues progression. Notice that the essential harmonic elements of the traditional twelve-bar blues have been retained in each example i.e.;

Ex 3

Bar 1 tonic
Bar 5	... sub-dominant
Bar 7 tonic
Bar 9 dominant (or IIIm7-V7)
Bar 11 tonic

Ex. 3

(a)

(b)

(c)

(d)

(e)

By applying previously discussed melodic techniques to these harmonic progressions, we may now construct some original blues compositions.

An important factor to be considered, if a real "blues" feeling is desired is the incorporation in the melody of the so-called "blue notes", i.e., the b3 and the b7 of the major scale.

Ex. 4

(a)

(b)

Following are examples of melodized blues chord changes:

Ex. 5

(a) Medium bright swing

(b) Medium blues

(c) Bright swing

C Bm7(b5) E7 Am7 D7(b9) Gm7 C7(b9) F7 Dm7 Db Maj7 C Eb7

(d) Slow blues

C F7 C Gm7 C7 F Bb7 C A aug7 Dm7 Bb7 Dm7 Db7 C Bb7 A aug7 Dm7 G7(b9)

ASSIGNMENT

1. Reharmonize each of the following chord progressions. In each case, write out the melodic line first, and consider it carefully as you re-write the given chord progression. The finished reharmonization should appear as follows:

reharmonized chord progression

melody (as is or improvised)

Em7 Eb7 Am7 D7(b9)

CHORD PROGRESSIONS

(for correction and reharmonization)

Eb Cm Fm Bb7 Eb Cm Fm Bb7 Eb Cm Fm7
 Eb Bb7 Eb Cm Fm Bb7 Eb Cm Fm Bb7 Eb Cm
 Fm7 Eb Fm7 Bb7 Eb Fm7 Bb7 Eb
 Abm Dbm Gb Bb F7 Fm7 Bb7 D7 Eb
 Eb

DAY BY DAY

Am7 D7 G Bm7
 E7 Am B7 Em A7
 Am7 E7 Dm E7 Am7 D7 G Dm
 E7 Am7 D7 G

DON'T TAKE YOUR LOVE FROM ME

1. G7 C Cdim G7 Dm G7

2. C C Cdim Dm7 A7 Dm A7

3. Fm6 G7 C Ab7 G7 C C7 F Fm

4. C Gm6 A7 Dm7 G7 C

FOOLS RUSH IN

1. Dm7 G7 C Am7 Dm7 G7 C

2. C F G7 C Am7 D7(b5) Am7 D7

3. Dm7 G Bb7(b5) A7 Dm Fm6 C

4. Am Dm G7 C Fm6 Ab7 C

FOR ALL WE KNOW

1. F G7 C7 F D7 Gm

2. C7 F Fdim C7 F Ddim

3. Gm7 C7 F E7 A7 D7 Gm

4. C7 F

HOME

1. Eb Cdim Fm Bb7 Fm Bb7 Bb+ Eb

2. Fm7 Bb7 Bb7 Eb Abm Eb

Eb Abm Abm6 Bb7 Eb Cdim

Fm Bb7 Fm Bb7 Eb

ONCE IN A WHILE

1. Eb C7 Fm Bb7 Eb

2. Eb Eb D7 G Am7 D7 G Am7 D7

G Am7 D7 G Gdim Fm7 Bb7 Eb C7

C7 Fm F7 Bb7 Eb

THAT OLD FEELING

1. Eb Bbm6 C7 Fm Fm Abm6

Bb7 Cm G7 Bbm C7 F7

2. Abm6 Bb7 Fm Abm6 G7 Gdim C7

Fm Abm6 Cm F7 AbmE7 Eb

NOTE: In the event that you are not familiar with any of the above, substitute standard tunes of your own choice.

2. Compose two "blues" chord progressions in every key. Each may be either traditional or modern in feeling.
3. Compose a melodic line to any ten of the chord progressions resulting from Problem No. 2. Achieve a "blues" feeling through the utilization of the lowered 3rd and lowered 7th degrees as described in this lesson.
4. Using any of the blues compositions from Problem No. 3, set up a score for each of the following musical situations (using a different original for each problem):

(a) original blues ...

sax soli - five-part
block - A, A, T, T, B



(b) original blues ...
sax unison

brass background
(closed or open)
3 trumpets
2 trombones



(c) original blues ...

trumpet solo

sax background
(closed or open)
A, A, T, T, B

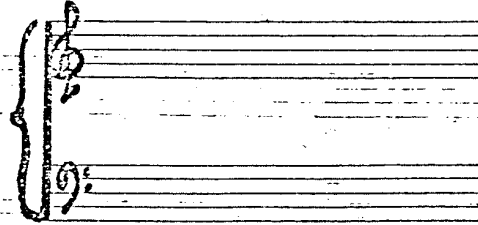


(cont'd next page)

(Problem 4 - cont'd)

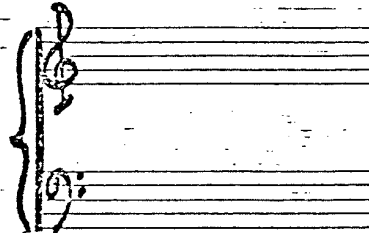
(d) original blues ...

brass soli
five-part
(open or closed)

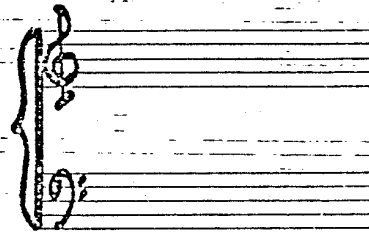


5. Using one of your original blues compositions as a guide,
set up a score as follows using layout as shown below:

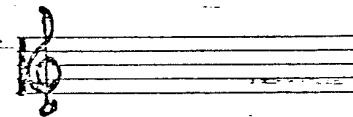
brass
3 trumpets
2 trombones



saxes
A, A, T, T, B



chord progression



A 1st 12 bars

original melody ... sax unison (or octaves)

B 2nd 12 bars

original melody ... sax unison
brass background (cup mutes)

C 3rd 12 bars

improvised melody ... trumpet solo
sax background (closed or open)

D 4th 12 bars

improvised melody ... trombone solo
sax background ... A, A, T, T, B (closed)

E 5th 12 bars

original melody ... brass soli (closed or open)

F 6th 12 bars

original melody ... sax unison
brass background (cup mutes)

NOTE: The successful completion of Problems 4 and 5 will depend on:

- a. the musical quality of the original composition ... try to select those which sound best. to you.
- b. your ability to visualize the timbre and individual characteristics of each of the instruments or instrumental sections for which you are writing try to literally "hear" as you write.

LESSON NO. 21

A. THE RHYTHM SECTION

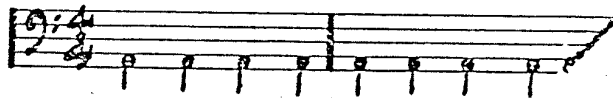
In this lesson we discuss the four instruments of the rhythm section and their function in the orchestra.

1. DRUMS (percussion)

The dance band or jazz drummer makes use of a number of different percussion instruments.

- a. Bass Drum notated on the bottom space with stems down (bass clef).

Ex. 1



- b. Snare Drum notated in the third space with stems up.

Ex. 2



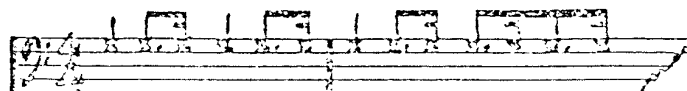
NOTE: "Snares on" will produce the sound normally associated with the snare drum; "snares off" will result in a more muffled "tom-tom" like sound.

- c. Cymbals notated in the fourth space with stems up special note shapes as follows:

x quarter note

◊ half note


Ex. 3




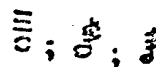
- d. Tom-Tom (one or several) notated as snare drum but with "T. T." indicated before the tom -tom passage.

Following is a list of abbreviations and expression marks commonly associated with drumming and their meanings:

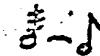
B. D.	Bass drum
S. D.	Snare drum
T. T.	Tom-tom
Cym	Cymbal
R. S.	Rim shot
St	Sticks
Br	Brushes

 repeat preceding bar

 repeat preceding two bars

 Roll

NOTE: a drum roll should always have an ending attack;

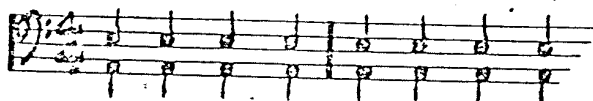
i. e.; 

Remember that a drummer's primary function is to provide a steady rhythmic foundation for the band and that he should depart from this only for occasional special effect (i. e. to provide fill-ins between ensemble passages; to emphasize percussive orchestral figures; etc.).

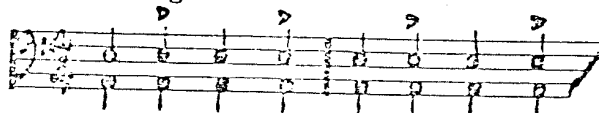
Following are some of the basic beats commonly used by the dance-band drummer.

Ex. 4

(a) straight 4



(b) "2" feeling



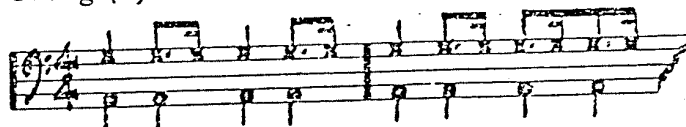
or:



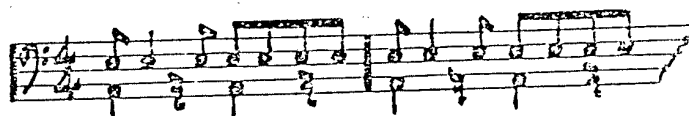
(c) straight 4 (brushes)



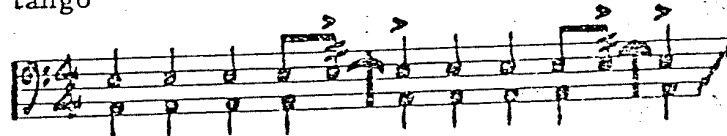
(d) swing (cymbal or hi-hat)



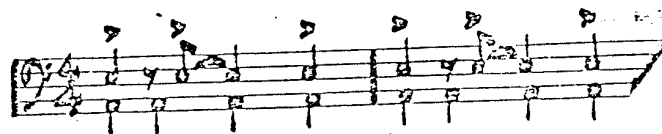
(e) beguine



(f) tango



(g) rock and roll !!!!



In using each of the above, the term "ad lib" is usually noted on the drum part allowing the drummer freedom in following the arrangement. It is also customary to indicate the predominant solo or section activity on the drum part.

NOTE: The tendency will always be to overarrange for the drummer. Unless some specific effect is desired, give him as little as possible to read.

2. STRING BASS (Bass fiddle)

In dance band or jazz writing, the bass is usually plucked (pizzicato; pizz.), but may be used with bow for special effect (arco).

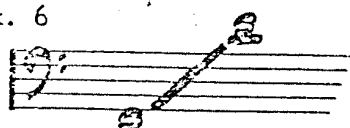
The bass, naturally enough, is notated in the bass clef and written one octave higher than it actually sounds. The four strings are tuned as follows:

Ex. 5



The practical range of the bass (transposed) is:

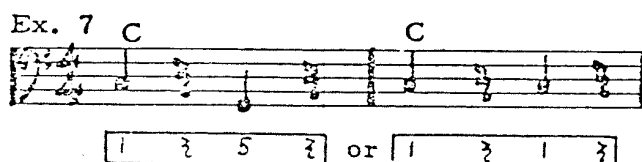
Ex. 6



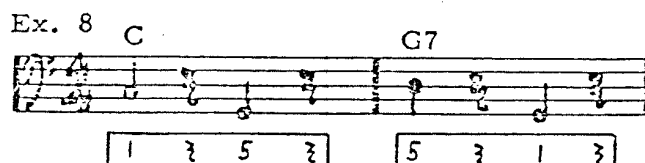
but higher notes are possible and are used for special effect in solo passages.

The following illustrations will serve as a guide in the writing of bass parts:

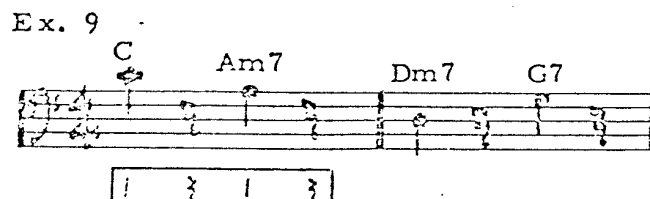
(a) with one chord per bar



(b) when a I chord is followed by its V7

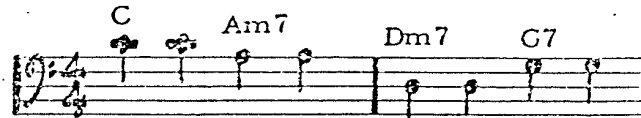


(c) with two chords per bar



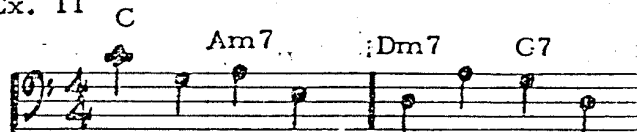
(d) rests may be replaced by repeated notes

Ex. 10



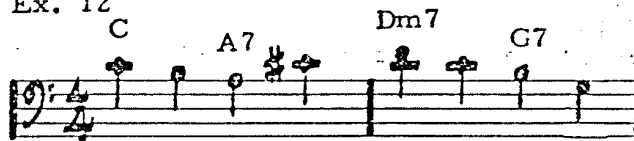
(e) or: 1 5 may be used instead of 1 1

Ex. 11



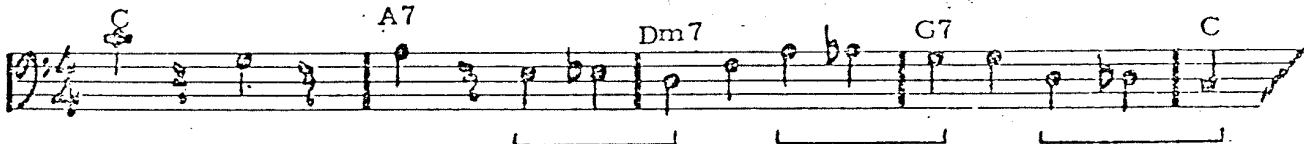
(f) chord or scale notes other than 1 and 5 (usually 3 or 7) may be used to provide melodic motion.

Ex. 12



(g) where the root motion of the chord progression moves down a fifth, a passing b5 may be used on either dom. 7th or minor 7th chords to provide chromatic bass motion (5 - b5 - 1).

Ex. 13

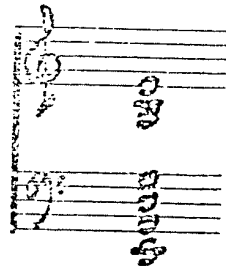


The preceding must necessarily be considered as a general outline and other techniques may be used where they appear to be musically justified.

3. GUITAR

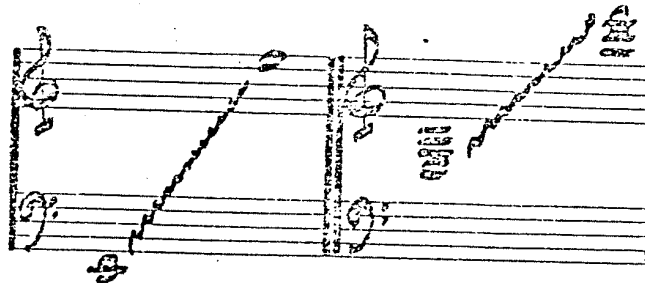
When used for single string passages, the guitar is written one octave higher than it actually sounds. The six strings of the Guitar are tuned as follows:

Ex. 14



The practical solo range of the guitar (transposed) is:

Ex. 15



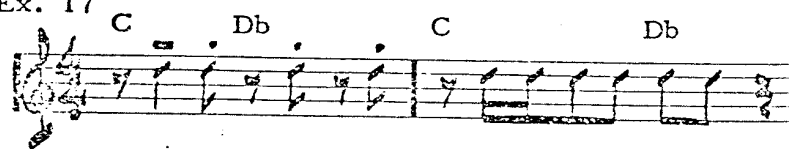
In rhythm work, the actual voicing of the chord is normally left to the guitarist, with the arranger simply indicating the chord symbols and the number of beats each chord is to occupy.

Ex. 16



Special rhythmic effects may be indicated as in the following illustration:

Ex. 17



4. PIANO

The arranger may use either of two styles in writing piano parts, depending upon:

- the style of playing desired, and;
- the demands of the arranging assignment

The simplest type of piano part, and that which allows the pianist the most freedom simply consists of a combination of the bass and guitar parts. The piano player is expected to create an appropriate rhythmical background from this outline.

Following is an illustration of a piano part of this type.

Ex. 18

Cmaj7 A7(b9) Dm7 G7 C

Ad lib

It is also desirable in certain situations to indicate the melodic line in cue form to guide the piano player as he improvises a background.

Ex. 19

Cmaj7 A7(b9) Dm7 G7 C

Although somewhat more demanding of the arranger, the following type of piano part should be used when:

- a specific piano effect is desired, or
- the pianist is unable to spontaneously create his own part from the chord symbols and bass line.

In writing this type of piano part, try to consider the following principles:

- let the left hand duplicate the bass part.
- consider the technical limitations of the pianist.
- write no higher than in rhythmic passages.

- d. keep smooth voice leading between adjacent chords in the right hand.
- e. treat the piano as a rhythm instrument; it is not necessary for the piano part to outline every accent and nuance of the ensemble.
- f. in writing "boom-chick" style piano parts, use mostly three-part chords in the right hand (usually 1, 3, 5 with triads; 1, 3, 7, or 3, 5, 7 with seventh chords).

Following is an example of a piano part of this type:

Ex. 20

Lead

Piano

Bm7(b5) E7

Am7 F7

G E7(b9)

Am7 D7

Gmaj7

Bm7 E7

Am7 D7

Gmaj7 Am7

An effective device in creating full sounding piano backgrounds is the "thumb counter-melody". In this technique, the lowest voice of the three-part harmonic continuity in the right hand forms a sustained melodic counter-line, while the upper two voices attack on the 2nd and 4th beats. (Left hand attacks on the 1st and 3rd beats.)

Depending upon where the natural counter-line falls, the counter-melody may sometimes occur in the top voice of the right hand, while the lower two voices provide the rhythmic accents on the 2nd and 4th beats.

The following example illustrates this principle of "counter-melody."

Ex. 21

The musical score for Ex. 21 is divided into three systems, each with three staves: Lead (top), Piano (middle), and Bass (bottom). The first system contains four measures with chords: Gmaj7, Am7, Bm7, E7, Am7, and D7. The second system contains four measures with chords: Bm7(b5), E7, Am7, F7, G, and E7(b9). The third system contains two measures with chords: Am7 (D ped), D7, and Gmaj7. The Lead staff features a counter-melody line, and the Piano and Bass staves provide harmonic support with various chord voicings and pedal points.

The foregoing should not be interpreted as an exhaustive analysis of the instruments of the rhythm section. A thorough study of each of the instruments individually would be necessary for this and, obviously, the scope of this course does not allow for concentrated coverage of any one instrument. Rather, the information given in Lesson No. 21 is intended to serve as a general guide in enabling you to arrange for the rhythm section.

A careful study of the following examples illustrating various rhythm section styles is recommended.

Ex. 22 (a) Slow Ballad

Melody

Guitar

Drums

Bass

Piano

F D7(b9) Gm7 C7 Gm7 C7 F

F D7(b9) Gm7 C7 Gm7 C7 F

Am7 D7(b9) Gm7 C7 F D7(b9) Gm7 C7(b9)

Am7 D7(b9) Gm7 C7 F D7(b9) Gm7 C7(b9)

Ex. 22 (b) Medium Swing

Music score for Ex. 22 (b) Medium Swing, measures 1-4.

Melody: Treble clef, 4/4 time. Notes: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F#4 (quarter), E4 (half).

Guitar: Chords: C, Bm7(b5) E7, Am7 D7(b9), Gm7 C7. Rhythmic notation: four measures of eighth-note patterns.

Drum: Rhythmic notation: four measures of eighth-note patterns.

Bass: Chords: C, Bm7(b5) E7, Am7 D7(b9), Gm7 C7. Rhythmic notation: four measures of eighth-note patterns.

Piano: Chords: C, Bm7(b5) E7, Am7 D7(b9), Gm7 C7. Rhythmic notation: four measures of eighth-note patterns.

Music score for Ex. 22 (b) Medium Swing, measures 5-8.

Melody: Treble clef, 4/4 time. Notes: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F#4 (quarter), E4 (half).

Guitar: Chords: F, Bb7, C Bb7, A7. Rhythmic notation: four measures of eighth-note patterns.

Drum: Rhythmic notation: four measures of eighth-note patterns.

Bass: Chords: F, Bb7, C Eb7, A7. Rhythmic notation: four measures of eighth-note patterns.

Piano: Chords: F, Bb7, C Eb7, A7. Rhythmic notation: four measures of eighth-note patterns.

Ex. 22 (b) (cont.)

Ex. 22 (b) (cont.) is a musical score for guitar and piano. It consists of two systems, each with a guitar staff and a piano staff. The guitar staffs show a sequence of chords: Dm7, Dm7 Gaug7, and C. The piano staffs show a corresponding melodic line. The score is divided into measures by vertical bar lines.

Ex. 22 (c) Waltz

Ex. 22 (c) Waltz is a musical score for a five-piece band: Melody, Guitar, Drums, Bass, and Piano. The score is divided into measures by vertical bar lines. The chords for the guitar and piano parts are G7, C7(aug), C7, F, and Dm7. The melody part shows a sequence of notes. The drums part shows a rhythmic pattern. The bass part shows a sequence of notes. The piano part shows a sequence of notes.

Ex. 22 (c) (cont.)

The first system of the musical score consists of two staves. The top staff contains four measures with the following chords: G7, C7(aug) C7, Am7(b5), and D7. The bottom staff contains four measures with the following chords: G7, C7, Am7(b5), and D7. The notation includes various musical symbols such as notes, rests, and accidentals.

The second system of the musical score consists of two staves. The top staff contains four measures with the following chords: Gm7, C7, Am7(b5), and D7(b9). The bottom staff contains four measures with the following chords: Gm7, C7, Am7(b5), and D7(b9). The notation includes various musical symbols such as notes, rests, and accidentals.

Ex. 22 (c) (cont.)

The musical score is divided into two systems, each with a treble and bass staff. The melody is written in the treble staff of the top system. The piano accompaniment is written in the bass staff of the top system and the treble and bass staves of the bottom system. The key signature is one sharp (F#) and the time signature is 4/4. The score is divided into three measures by vertical bar lines. The first measure is labeled G7(#11), the second measure is labeled C7(#9), and the third measure is labeled Fmaj7. The piano accompaniment consists of chords and single notes. In the third measure, there is a long horizontal line in the bass staff of the bottom system, indicating a sustained chord or a long note.

System 1:

- Measure 1: G7(#11)
- Measure 2: C7(#9)
- Measure 3: Fmaj7

System 2:

- Measure 1: G7(#11)
- Measure 2: C7(#9)
- Measure 3: Fmaj7

Ex 22 (d) Beguine

Melody

Guitar

Drums

Bass

Piano

Measures 1-4 of the musical score. The Melody staff shows a sequence of eighth and sixteenth notes. The Guitar staff has a whole rest in measure 1, followed by eighth notes in measures 2 and 3, and a whole rest in measure 4. The Drums staff shows a steady eighth-note pattern. The Bass staff has a whole rest in measure 1, followed by eighth notes in measures 2 and 3, and a whole rest in measure 4. The Piano staff has a whole rest in measure 1, followed by eighth notes in measures 2 and 3, and a whole rest in measure 4. Chords are indicated above the staves: Dm6, Eb7, and Dm6.

Measures 5-8 of the musical score. The Melody staff shows a sequence of eighth and sixteenth notes. The Guitar staff has a whole rest in measure 5, followed by eighth notes in measures 6 and 7, and a whole rest in measure 8. The Drums staff shows a steady eighth-note pattern. The Bass staff has a whole rest in measure 5, followed by eighth notes in measures 6 and 7, and a whole rest in measure 8. The Piano staff has a whole rest in measure 5, followed by eighth notes in measures 6 and 7, and a whole rest in measure 8. Chords are indicated above the staves: Eb7, Dm6, C7, Eb7, A7, and Dm6.

ASSIGNMENT:

1. Following are the common chord changes to some standard tunes.
 - a. correct and/or re-harmonize the given chord changes.
 - b. score parts for the rhythm section as follows:

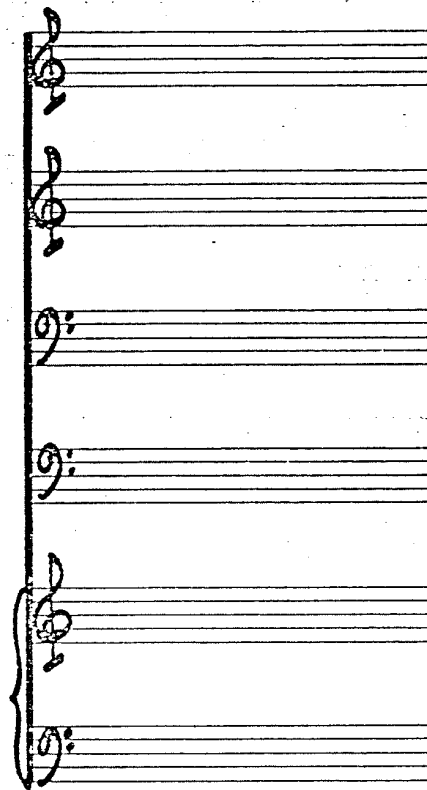
Melody
(as is or improvised)

Guitar

Drums

Bass

Piano



NOTE : In the event that any of the indicated tunes are not familiar to you, simply substitute standard tunes of your own choice.

(a) "LONG AGO AND FAR AWAY"

Chords for (a) "LONG AGO AND FAR AWAY":

- Measure 1: F
- Measure 2: Dm
- Measure 3: Gm7
- Measure 4: C7
- Measure 5: Fmaj7
- Measure 6: Gm
- Measure 7: C9
- Measure 8: F6
- Measure 9: C7
- Measure 10: F6
- Measure 11: D7
- Measure 12: Gm7
- Measure 13: C7
- Measure 14: Ab
- Measure 15: Bbm7
- Measure 16: Eb9
- Measure 17: Abmaj7
- Measure 18: G7
- Measure 19: C
- Measure 20: C6
- Measure 21: Bb
- Measure 22: C7
- Measure 23: Gm7
- Measure 24: Gm7
- Measure 25: C9
- Measure 26: F
- Measure 27: Dm
- Measure 28: Gm7
- Measure 29: C7
- Measure 30: Fmaj7
- Measure 31: Gm6
- Measure 32: Gm7
- Measure 33: C9
- Measure 34: F6
- Measure 35: C9
- Measure 36: C7
- Measure 37: F6
- Measure 38: D7
- Measure 39: Gm7
- Measure 40: C7
- Measure 41: F9
- Measure 42: Cm7
- Measure 43: F7
- Measure 44: Bbmaj7
- Measure 45: Bb
- Measure 46: Dm
- Measure 47: Gm7
- Measure 48: F
- Measure 49: Dm7
- Measure 50: Gm7
- Measure 51: C7
- Measure 52: F
- Measure 53: Db9
- Measure 54: Gb
- Measure 55: C7(b9)
- Measure 56: 2.F

(b) "HOW HIGH THE MOON"

Chords for (b) "HOW HIGH THE MOON":

- Measure 1: Em7
- Measure 2: D7
- Measure 3: D
- Measure 4: G6
- Measure 5: G
- Measure 6: Bb6
- Measure 7: C7
- Measure 8: Gm
- Measure 9: C7
- Measure 10: Bb7
- Measure 11: C7
- Measure 12: C6
- Measure 13: F6
- Measure 14: F
- Measure 15: C
- Measure 16: Ab6
- Measure 17: Bb7
- Measure 18: Ab
- Measure 19: Bb7
- Measure 20: Eb
- Measure 21: G7
- Measure 22: Cm
- Measure 23: D7
- Measure 24: Gm
- Measure 25: Cm6
- Measure 26: G
- Measure 27: Am
- Measure 28: D7
- Measure 29: G
- Measure 30: Gm
- Measure 31: C6
- Measure 32: D7
- Measure 33: Em6
- Measure 34: D7
- Measure 35: 2.G7
- Measure 36: C6
- Measure 37: Cm
- Measure 38: G
- Measure 39: Gm
- Measure 40: C6
- Measure 41: D7
- Measure 42: Em6
- Measure 43: D7
- Measure 44: G

(c) "MY FUNNY VALENTINE"

Chords for "MY FUNNY VALENTINE":
 Staff 1: Cm, Cm(maj7), Cm7, Cm6, Ab
 Staff 2: Fm, Fm6, G7, Cm, Cm(maj7)
 Staff 3: Cm7, Cm6, Ab, Fm, F7, Abm6
 Staff 4: Bb7, Eb, Bb7, Eb, Bb7, Eb, Bb7, Eb, Bb7
 Staff 5: Eb, G7, Cm, Fm, Ab7, G7, Cm
 Staff 6: Cm(maj7), Cm7, Cm6, Ab, Dm7(b9), G7
 Staff 7: Cm, Eb7, Ab, Fm7, Bb7, Eb

(d) "I MARRIED AN ANGEL"

Chords for "I MARRIED AN ANGEL":
 Staff 1: F, C7, F, Gm7, C7, F, Gm7, C7
 Staff 2: F, D7, Gm7, C7, 1. F, 2. F, Dm, G7
 Staff 3: C, Dm, G7, C, Cm7, F7, Bb
 Staff 4: F, C7, C7, F, C7, F, Gm7, C7
 Staff 5: F, Gm7, C7, F, F7, Gm7, C7, F

(e) "MOONLIGHT IN VERMONT"

Musical score for "MOONLIGHT IN VERMONT" in B-flat major, 4/4 time. The score consists of five staves of music, each with a key signature of two flats and a common time signature. The notes are represented by vertical lines on a five-line staff. The chords are indicated by letters and numbers above the staff.

Chords: Eb Ebmaj7 Fm7 E7 Eb Cm Db9 Fm Bb7 Eb Eb Cm Fm7 E7 Eb Cm Db9 Fm Bb7 Eb Am7 D7 Gmaj7 G6 Am7 Ab9(b5) Gmaj7 G6 Bbm7 Eb7 Abmaj7 Ab6 Bbm7 Eb9 Ab B7 DS al Coda F7 E9 Eb

(f) "I REMEMBER YOU"

Musical score for "I REMEMBER YOU" in D major, 4/4 time. The score consists of seven staves of music, each with a key signature of two sharps and a common time signature. The notes are represented by vertical lines on a five-line staff. The chords are indicated by letters and numbers above the staff.

Chords: G F#7 G Dm7 G7 C Cm F#° G 1. Am Am7 D7 2. Dm7 G7 C F#m7 B7 E F#m7 B7 E Em7 A7 D F#7 Bm F#7 G F#7 G Bm7(b5) E7 Am7 Cm G A7 G F# G Em7(b5) Am7 D7 G

2. Score each of the following melodies as indicated.
If range of given melody seems impractical for indicated instrumentation, transpose to more suitable key.

(a) Ballad

Two staves of musical notation in 4/4 time. The first staff contains a melody with four measures, each with a chord above it: Fm7, Db7, Eb, and F7. The second staff contains a melody with seven measures, each with a chord above it: Fm7, Bbaug7, Eb, Ab7, Gm7, Gb7, and Fm7.

Melody ----- Sax Unison
Background ----- Five Brass (Trp., Trp., Trp., Tbn., Tbn.,)
Rhythm ----- Guitar, Drums, Bass, Piano

(b) Swing

Two staves of musical notation in 4/4 time. The first staff contains a melody with eight measures, each with a chord above it: Eb, Caug7, Fm7, Bbaug7, Eb, Eb7(b9), Ab, and Db7. The second staff contains a melody with six measures, each with a chord above it: Eb, C7(b9), Fm7, Bb7, Eb, and Bbaug7.

Melody ----- Five-part Sax Soli (A, A, T, T, B)
Rhythm ----- Guitar, Drums, Bass, Piano

(c) Swing

Two staves of musical notation in 4/4 time. The first staff contains a melody with eight measures, each with a chord above it: Bbm7, Eb7, Ab, Fm7, Bbm7, Eb7, Ab, and Eb7. The second staff contains a melody with eight measures, each with a chord above it: Am7, D7, G, Bbm7, Eb7, Ab, and Eb7.

Melody ----- Five-part Brass Soli (Trp., Trp., Trp., Tbn., Tbn.,)
Rhythm ----- Guitar, Drums, Bass, Piano

(d) Ballad

Two staves of musical notation for a ballad. The first staff has a treble clef and a key signature of one flat (Bb). The second staff has a bass clef. Chord symbols are written above the notes: C, Cm7, F7, Bb, Bbm7, Eb7, Ab, Dm7, Db7, C, Eb7, Ab, Db7, C. There are triplets and slurs over some notes.

Melody ----- Trumpet Solo
Background ----- Five Saxes (A, A, T, T, B)
Rhythm ----- Guitar, Drums, Bass, Piano

(e) Rhumba

Two staves of musical notation for a rhumba. The first staff has a treble clef and a key signature of one flat (Bb). The second staff has a bass clef. Chord symbols are written above the notes: Gm7, C7, F, Dm7, Gm7, C7, Am7(b5), D7, Gm7, C7, F, Dm7, Gm7, C7, F, D7(b9), Gm7. There are triplets and slurs over some notes.

Melody ----- Sax Unison
Background ----- Five Brass (Trp., Trp., Trp., Tbn., Tbn.)
Rhythm ----- Guitar, Drums, Bass, Piano

(suggested piano accompaniment patterns)

Two piano accompaniment patterns for the rhumba. The first pattern is in a treble clef with a key signature of one flat (Bb) and a 4/4 time signature. It shows a Gm7 chord and a C7 chord. The second pattern is in a bass clef with a key signature of one flat (Bb) and a 4/4 time signature. It shows a Gm7 chord and a C7 chord. The word "or" is written between the two patterns.

(f) Slow Ballad

Two staves of musical notation for a slow ballad. The first staff has a treble clef and a key signature of one flat (Bb). The second staff has a bass clef. Chord symbols are written above the notes: Ab, Gm7, Fm7, Eb, C7(b9), Fm7, Bb7(b9), Ab, Gm7, Eb, C7, Fm7, Bb7, Eb. There are triplets and slurs over some notes.

Melody ----- Four-part Trombone Soli
Rhythm ----- Guitar, Drums, Bass, Piano

3. Using any standard tune of your choice :

- (a) transpose to key suitable for indicated instrumentation. (if necessary)
- (b) re-harmonize and/or correct chord changes.
- (c) make any desired rhythmic and/or melodic changes.
- (d) score as follows:

Melody ----- Trumpet Solo
Background ----- Five Saxes (A, A, T, T, B)
Rhythm ----- Guitar, Drums, Bass, Piano

5. (a) Compose thematic introductions to each of the tunes listed in Problem #1 (or any six standard tunes).
- (b) Score each introduction for rhythm section plus any one of the following:
- 1. brass soli
 - 2. sax soli
 - 3. brass solo (or unison);
sax background
 - 4. sax solo (or unison);
brass background

LESSON NO. XXII

SMALL BAND WRITING

A. TWO HORNS

When scoring for two melody instruments, any of the following may be used:

1. unison or octaves
2. duet style (i.e., two-part soli)
3. melody and counter-melody

1. Unison

The decision as to whether to use unison or octaves is largely dependent upon the instruments being used and the range of the melodic line. Either is effective.

2. Duet Style

Try to observe the following principles in writing a two-part soli:

- (a) If lead voice is a chord note, use chord note in second voice; if lead voice is an approach note, use an approach in the second voice; etc.

Ex. 1

Example 1 is a musical score for two staves, likely representing two horns. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one sharp (F#). The score is divided into four measures by vertical bar lines. Above the staves, the chords are labeled: C, C, Gm7, C7, and F. The first measure shows a C major triad in both staves. The second measure shows a C major triad in both staves. The third measure shows a Gm7 chord in both staves. The fourth measure shows a C7 chord in both staves. The final measure shows an F major triad in both staves. The notation includes various intervals and chord structures, with some notes marked with '3' and '5' indicating thirds and fifths.

- (b) Try to use intervals of 3rds and 6ths as much as possible. Consecutive 3rds and 6ths may be freely used, but avoid using 2nds, 4ths, 5ths and 7ths consecutively.

Ex. 2 (a)

GOOD

Musical notation for Ex. 2 (a) showing good voice leading. The example consists of two staves (treble and bass clef) with a key signature of one flat (B-flat). The progression is: Gm7 (B-flat, D-flat, F, A-flat), C7 (F, A-flat, B-flat, C), F (F, A-flat, C, E-flat), F#° (F#, A-flat, C), and Gm7 (B-flat, D-flat, F, A-flat). The voices move smoothly between chords, primarily using 3rds and 6ths.

Ex. 2 (b)

BAD

Musical notation for Ex. 2 (b) showing bad voice leading. The example consists of two staves (treble and bass clef) with a key signature of one flat (B-flat). The progression is: Gm7 (B-flat, D-flat, F, A-flat), C7 (F, A-flat, B-flat, C), F (F, A-flat, C, E-flat), Ab° (A-flat, B-flat, C), and Gm7 (B-flat, D-flat, F, A-flat). The voice leading is poor, with awkward intervals and non-functional connections between the F and Ab° chords.

(c) When using intervals other than 3rds or 6ths, try to have them lead directly to either a 3rd or 6th through contrary or oblique motion.

Ex. 3 (a) Contrary motion - voices move in opposite directions.

Musical notation for Ex. 3 (a) showing contrary motion. The example consists of two staves (treble and bass clef) with a key signature of one flat (B-flat). The progression is: G7 (F, A-flat, C, E-flat), C (F, A-flat, C, E-flat), and Dm7 (F, A-flat, C, E-flat). The voices move in opposite directions (contrary motion) between the chords. Fingerings are indicated: 4 and 6 for G7 to C, and 5 and 3 for C to Dm7.

Ex. 3 (b) Oblique motion - one voice moves while the other sustains or repeats

Musical notation for Ex. 3 (b) showing oblique motion. The example consists of two staves (treble and bass clef) with a key signature of one flat (B-flat). The progression is: G7 (F, A-flat, C, E-flat), C (F, A-flat, C, E-flat), and Dm7 (F, A-flat, C, E-flat). The voices move in oblique motion (one voice moves while the other sustains or repeats) between the chords. Fingerings are indicated: 4 and 3 for G7 to C, and 7 and 6 for C to Dm7.

Following is an example of a given melody harmonized in duet style:

Ex. 4

3. Melody and Counter-melody

This technique is certainly the most modern form of two-part writing, and usually the most interesting musically. A detailed explanation of counter-melody writing has been included in that part of the course dealing with backgrounds.

Ex. 5

It is, of course, possible to intermingle the three techniques described thus far.

Ex. 6

Chords for Ex. 6:

- System 1: G7, C, Eb^o, Dm7, G7(b9), C, D7, Dm7, G7
- System 2: Am, Am(maj7), Am7, D7, Dm7, G7, Cmaj7, C6

B. THREE HORNS

In scoring for three melody instruments, any of the following may be effectively used:

1. Unison (or octaves)
2. Unison melody with solo counter-melody
3. Solo melody with unison counter-melody
4. Solo melody with harmonized counter-melody
5. Duet style soli with solo counter-melody
6. Three-part soli
7. Three independent lines

1. Unison

Ex. 7

Chords for Ex. 7:

- Staff 1: G7, C, Dm7, G7

2. Unison melody with solo counter-melody

Ex. 8

Ex. 8 is a musical score in 7/8 time, consisting of four measures. The first measure is marked with a G7 chord, the second with a C chord, the third with a Dm7 chord, and the fourth with a G7 chord. The melody is played in unison on the upper two staves, while the lower staff provides a solo counter-melody.

3. Solo melody with unison counter-melody

Ex. 9

Ex. 9 is a musical score in 7/8 time, consisting of four measures. The first measure is marked with a G7 chord, the second with a C chord, the third with a Dm7 chord, and the fourth with a G7 chord. The melody is played on the upper staff, while the lower staff provides a unison counter-melody.

4. Solo melody with harmonized counter-melody

Ex. 10

Ex. 10 is a musical score in 7/8 time, consisting of four measures. The first measure is marked with a G7 chord, the second with a C chord, the third with a Dm7 chord, and the fourth with a G7 chord. The melody is played on the upper staff, while the lower staff provides a harmonized counter-melody.

5. Duet style soli with counter-melody

Ex. 11

6. Three-part soli

In setting up a soli voicing for three horns, try to observe the following:

- (a) every chordal harmonization should include the third.
- (b) every Dominant 7th chord harmonization should include the seventh.
- (c) altered chords (#5, b5, b9, etc..) should include the altered function.
- (d) do not use "hi" and related "lo" in the same voicing.
- (e) harmonize chord notes, approach notes, etc., as they would normally be harmonized in a four-part voicing, omitting the least important note.

REFERENCE CHART OF THREE-PART SOLI VOICINGS

MAJOR or MINOR

Lead	1	3	5	6	7	9
Under	5 6	1 1 7	3 3 (9)	3 5	5 3	7 6 5
voices	3 3	5 6 5	1 7 (6)	1 3	3 1	3 3 3

DOMINANT 7th

Lead	1	3	5	7	9	11	13
Under	7	1 9 7	3 (b9)*	5 3	7 (13)*	9 7	3 (3)* (b9)*
voices	3	7 7 5	7 (7)	3 1	3 (3)	7 5	7 (b9) (7)

MINOR 7th

Lead	1	3	5	7	9	11
Under	7 5	1 7	3 3	5 3	7 5	1 7
voices	3 3	5 5	1 7	3 1	3 3	5 5

AUGMENTED 7th AND DIMINISHED 7th

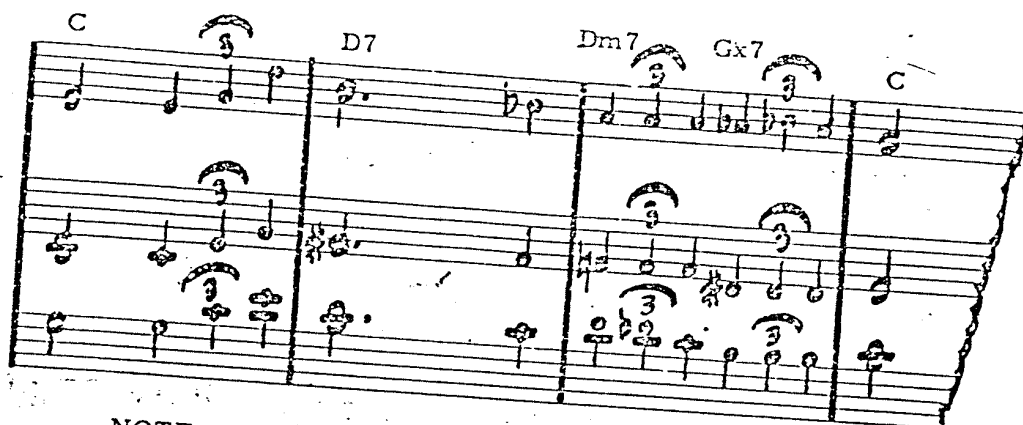
Lead plus any two other chord notes.

* Irregular, but effective.

NOTE: In any of the above voicings, the two under voices may be inverted to form open position.

Ex. 12

Ex. 12 shows three-part soli voicings for various chords. The notation includes lead and under voices for each chord. The chords are: G7, Gx7, C, F#m7, B7(b9), Em7, A7, Dm7, and G7. The notation includes lead and under voices for each chord.



NOTE: In addition to its application to combo writing, the technique of three-part soli writing may also be used when scoring for any three horn section. (i.e., three saxes, three trumpets, three trombones, etc...)

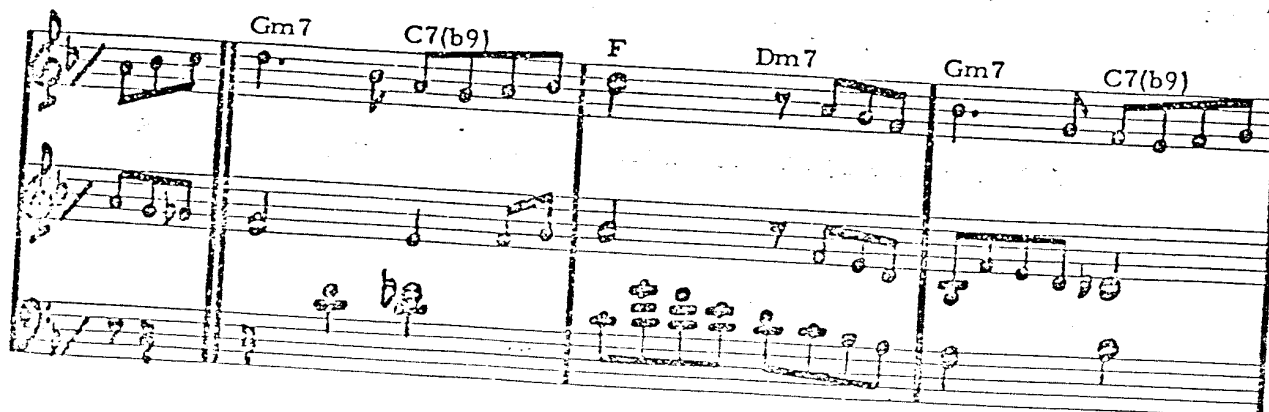
7. Three independent lines

This is one of the most modern, most difficult and most interesting methods for scoring for three horns. The technique is as follows:

- (a) set up melodic lead
- (b) compose a counter-melody
- (c) compose an additional counter-melody by:
 1. establishing "missing" chordal functions at strong points of attack, and
 2. filling in with non-conflicting melodic motion.

It will, necessarily, take a reasonable amount of experience to become proficient at this type of writing.

Ex. 13



Again, in actual practice, any of the forms of three-part writing described in this lesson may be freely intermingled.

EXERCISE

FOUR HORNS

Below are listed the most common voicings used in scoring for four melody instruments. Needless to say, many other effective combinations are possible, and experimentation with various voicings is certainly advisable.

- (1) Unison (or octaves)
- (2) Four-part soli (closed or open)
- (3) Three-part soli (doubled lead)
- (4) Coupled two-part soli
- (5) Solo melody with three-part background etc., etc....

Following are illustrations of the four-part horn voicings described above :

Ex. 14

(1) Unison

Handwritten musical score for three staves. The top staff has a treble clef and contains a melody with notes and rests, including a 7-measure rest. Chord symbols G7, C, Dm7, and G7 are written above the staff. The middle staff has a treble clef and contains a wavy line, with the text "Col. I (Column I)" written above it. The bottom staff has a bass clef and contains a wavy line, with the text "Col. I 8va (OCTAVE LOWER)" written above it.

Ex. 15

(2) Four-part soli

* Dominant approach; open position for smoother leading in under voices.

Ex. 16

(3) Three-part soli (doubled lead)

Ex. 16 is a musical score for three-part soli (doubled lead). It consists of four measures. The first measure has a G7 chord above the first staff. The second measure has a C chord above the second staff. The third measure has a Dm7 chord above the third staff. The fourth measure has a G7 chord above the fourth staff. The solo instrument part is labeled 'Col. I 8VE.' and consists of a single line of music.

Ex. 17

(4) Coupled two-part soli

Ex. 17 is a musical score for coupled two-part soli. It consists of four measures. The first measure has a G7 chord above the first staff. The second measure has a C chord above the second staff. The third measure has a Dm7 chord above the third staff. The fourth measure has a G7 chord above the fourth staff. The solo instrument part is labeled 'Col. II' and consists of a single line of music.

* Doubling may occur in different octaves, depending upon instrumentation and range of melody.

Ex. 18

(5). Solo melody with three-part background

The musical score for Ex. 18 is written for five staves. It is divided into four measures by vertical bar lines. Above the first measure is the chord 'G7', above the second is 'C', above the third is 'Dm7', and above the fourth is 'G7'. The melody is primarily in the upper staves, while the background consists of three parts in the lower staves. The notation includes various musical symbols such as notes, rests, and bar lines.

Numerous variations of the basic principles outlined in this lesson are possible when working with five, six or more horns.

Following are some suggested voicings that are quite commonly used, but it advisable that you experiment as much as possible with other combinations.

Remember, also, that a very effective technique in big-band scoring is the use of a "small-band" within the "big-band".

D. FIVE HORNS

1. trumpet solo melody
four saxes four-part background
2. four saxes soli
trumpet solo obligato
3. two tbns., two tenors, bari.... five-part soli
4. alto, alto duet
tenor, tenor, bari three-part background
5. three trumpets three-part soli
two trombones unison counter-melody

6. trumpet (cup), clarinet two-part soli
trumpet (cup), clarinet
tenor solo counter-melody
7. trpt., alto, tenor, trbn., bari.... five-part soli
etc., etc.....

E. SIX HORNS

1. trumpet solo melody
five saxes five-part background
2. three trumpets six-part soli (four-part
three trombones soli, doubled lead and
second voice)
3. three trombones three part soli
tenor, tenor, bari three-part background
4. three trpts. (cup), trbn. (cup)..... four-part soli
two trombones (open)..... unison counter-melody
5. guitar, clarinet(lead)
three clarinets five-part soli
tenor (doubled lead)
6. trumpet solo obligato
trombone solo melody
alto, tenor, tenor, bari four-part background
etc., etc.....

2. Using any of the techniques described in this lesson, score any standard tune of your choice for:

trumpet
tenor
piano
bass
guitar
drums

3. Similarly, score any other standard tune of your choice for:

trumpet
tenor
trombone
piano
bass
guitar
drums

4. Score any standard tune of your choice for:

trumpet
alto
tenor
trombone
bari
piano
bass
guitar
drums

5. Score any standard tune of your choice for:

trumpet
trumpet
trombone
alto
tenor
bari
bass
guitar
drums
piano

LESSON NO. 23

OPEN VOICING (cont.)

Thus far, the only form of open voicing discussed has been that produced by dropping the second voice of a closed block harmonization down one octave.

Ex. 1

The example shows a sequence of chords: F, Daug7, D7, G7, Gm7, and C7. The notation is written on a grand staff (treble and bass clefs). The F chord is shown in two voicings: a closed block and an open voicing where the second voice is dropped an octave. The other chords are also shown in open voicing. The key signature has one sharp (F#).

Many other forms of open voicing may be effectively used, but for best results, certain factors must be considered and observed.

1. In closed block voicing (and 2nd dropped usually) the ear tends to identify melody and to accept a concerted harmonization under it without separating the bottom note from the rest of the chord.
2. The lower or more wide-spread a chord is voiced, the more important it becomes to have a "strong" function (i.e. root or fifth) on the bottom.
3. The relative strength and sonority of an open chord is largely determined by the position of the two bottom notes. It is important that you observe the following "low-interval" limits. Do not use voicings where the interval between the two bottom notes lies in a register lower than that indicated.

NOTE: Do not use a high degree as the bottom voice of any open chord.

Ex. 2 LOW-INTERVAL LIMITS

Major 7th Minor 7th Major 6th Minor 6th

Perfect 5th Augmented 4th (Dim. 5th) Perfect 4th Major 3rd Minor 3rd

(sustained) (short duration)

A. OPEN VOICINGS

1. Four part voicings

a. four part block harmonization (2nd voice dropped 8vb)

Ex. 3

Bbaug7 Eb Caug7 C7

Fm7 E7 Eb

b. four part block harmonization (3rd voice dropped 8vb)

Ex. 4

Caug7

F

Daug7

D7(b9)

Gm7

Gb7

F

c. four part block harmonization (2nd and 4th voices dropped 8vb)
(use in sax section only)

5

D7

G

Eaug7

E7

Am7

Ab7

G

In actual practice, it is not necessary to adhere to just one of these voicings in harmonizing a melodic line. Any of these open voicings (and closed) may be freely intermingled in order to achieve smooth and interesting inner voice motion.

Ex. 6

Bbaug7 Eb Caug7 C7

Fm7 E7 Eb

NOTE: Low interval limits have been considered in establishing the proper melodic register for each of the preceding examples. Normally, melody must be transposed from a third to a fifth higher when using 3rd dropped or 2nd and 4th dropped.

2. Five part voicings

- a. four part block harmonization - doubled lead
(2nd voice dropped 8vb)

Ex. 7

Dm F7 Em7(b5) Eb7 Dm C7

Bb7 Em7(b5) Aaug7 Dm

NOTE: In each of these five-part voicings, where high degree is in lead, related low degree may be substituted for high in place of doubled lead.

b. four part block harmonization - doubled lead
(3rd voice dropped 8vb)

8

Em G7 F#m7 (b5) F7

Em D7 C7 F#m7 (b5) B7 (b5, b9) Em

* not good - see adjustment in Ex. 11 (variable five part open voicing)

c. four part block harmonization - doubled lead
(2nd and 4th voices dropped 8vb)

Ex. 9

Fm Ab7 Gm7 (b5) Gb7

Fm Eb7 Db7 Gm7 (b5) C7 Fm

* not good - see adjustment in Ex. 11

d. four part block harmonization - added root
(closed - 2nd dropped 8vb - 3rd dropped 3vb)

NOTE: This technique is especially effective in establishing
a strong spread voicing for sustained chords.

C Aaug7 Dm7 Gaug7 Em7(b5) Aaug7 Dm7 C7 C

Again, any of these five part open voicings (and closed) may be intermingled in harmonizing a melodic line. Wherever possible, try to establish root or fifth on the bottom of any sustained chord.

Ex. 11

Em (Ab7) G7 F#m7(b5) F7

Em D7 C7 F#m7 B7 (b5) (b9) Em

A careful study of the following examples will help in developing an understanding of variable five part open voicing. When working with open voicings, try to remember the following general principles in addition to those given at the beginning of this lesson:

1. Closed or semi-open voicings are most effective in harmonizing fast moving passages.
2. Wide-spread voicings, with root on the bottom, are most effective on notes of relatively long duration and in sustained passages.
3. Use variable open voicings primarily to achieve smooth and interesting inner voice motion and to establish a strong bottom voice on notes of long duration.
4. Normally, wide-spread voicings are more effective in saxes than in brass.

2 2-R 2-R cl 2 2 2 2 3-R

C F7 C

2-R 2 2 2 2 2-R 2-R

Ex. 13

Gm7 C7 (Gb7) F Ab7

cl 2 cl-R cl-R cl-R cl-R 2-R 2-R

Gm7 Gb7 F

2-R 2-R

Ex. 14

Eb C7(b9)

cl cl-R

Ex. 14 (cont.) Fm7

Ex. 14 (cont.) Fm7. This musical score is for a clarinet (cl) and piano (piano). The key signature is B-flat major (two flats). The score is divided into five measures. The first measure has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The second measure has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The third measure has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The fourth measure has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The fifth measure has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The clarinet part is written in the upper staff and features a triplet of eighth notes in the first measure, a triplet of eighth notes in the second measure, a triplet of eighth notes in the third measure, a triplet of eighth notes in the fourth measure, and a triplet of eighth notes in the fifth measure. The piano part is written in the lower staff and features a triplet of eighth notes in the first measure, a triplet of eighth notes in the second measure, a triplet of eighth notes in the third measure, a triplet of eighth notes in the fourth measure, and a triplet of eighth notes in the fifth measure. The tempo is marked 'Allegretto'.

Bb7 Bb7(b9) Eb

cl-R cl cl cl-R cl-R

Ex. 15

Ex. 15. This musical score is for a clarinet (cl) and piano (piano). The key signature is F major (one flat). The score is divided into two systems, each with two measures. The first system has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The second system has a piano accompaniment with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The clarinet part is written in the upper staff and features a triplet of eighth notes in the first measure, a triplet of eighth notes in the second measure, a triplet of eighth notes in the third measure, and a triplet of eighth notes in the fourth measure. The piano part is written in the lower staff and features a triplet of eighth notes in the first measure, a triplet of eighth notes in the second measure, a triplet of eighth notes in the third measure, and a triplet of eighth notes in the fourth measure. The tempo is marked 'Allegretto'.

F D7(b9) Gm7 Ab°

Am7 Ab° Gm7 C7(sus4) F

cl cl-R

ASSIGNMENT

1. Harmonize each of the following melodies for a four-sax section (ATTB) using:

- a. closed position
- or:
- b. 2nd voice dropped 8vb
- or:
- c. 3rd voice dropped 8vb
- or:
- d. 2nd and 4th voices dropped 8vb
- or:
- e. any combination of the above

If considered advisable, melody may be transposed to a different key before completing the harmonization.

The image displays four musical staves, each containing a melody line and a series of chords for harmonization. The chords are written above the staff lines.

Staff 1: C, Eb°, Dm7 G7, C, Am, Dm7 G7

Staff 2: Gm7, C7, F, Bb7, C, Eb7, Ab, G7, C

Staff 3: F7, Bb7, Eb, Db7, C7

Staff 4: F7, Bb7, Eb, Ebaug7, Eb

2. Compose a background to each of the following given melodies. In each case, indicate the instrumentation you are picturing for the solo and for the background. Use any of the voicings listed in Problem No. 1. Given melody may be altered or transposed before harmonizing.

Chord voicings for the melody:

Staff 1: F, Bb7, F, Bb7, A7, Ab7

Staff 2: Gm7, Eb7, F, D7(b9), Gm7, C7

Staff 3: Aaug7, Dm6, E7, AmAm(#7)Am7D7, Gm7, C7, F

Staff 4: Em7(b5) A7, Dm, Bb7, Aaug7 A7

3. Harmonize each of the following melodies for a five part sax section using:

- a. closed position - doubled lead
- or:
- b. 2nd voice dropped 8vb - doubled lead
- or:
- c. 3rd voice dropped 8vb - doubled lead
- or:
- d. 2nd and 4th voices dropped 8vb - doubled lead
- or:
- e. closed position - added root
- or:
- f. 2nd voice dropped 8vb - added root
- or:
- g. 3rd voice dropped 8vb - added root
- or:
- h. any combination of the above

Again, original melody may be transposed or altered in any way.

Fm Db7 C7(b9) Fm Bbm7 Eb7(b9)
 Ab Db7 C7 Fm Db7 C7
 C7 F D7(b9) Cm7 C7 F Am7(b5) D7
 Gm7 Eb7 F D7(b9) Cm7 C7 F

4. Compose a background to each of the following melodies using any of the voicings indicated in Problem No. 3. In each case, indicate instrumentation for which you are writing.

Eb Eb C7 Fm7 Db7 Eb7
 Cm Cm(maj7) Cm7 F7 Fm7 Bb7

b.

Chord changes for the four staves:

- Staff 1: C, C7, G, Dm7, G7
- Staff 2: C, F7, G, F7, E7
- Staff 3: Am7, F7, G, E7
- Staff 4: Am7, F7, E7, Eb7, D7, C, C7, C

NOTE: The given chord changes to each of the melodies in the assignment may be re-harmonized wherever you feel that other chords would be more effective with the particular voicings you are using.

5. Score any standard tune of your choice as follows:

Trumpet Solo
 Five-part Sax Background (open position)
 Bass
 Drums
 Guitar
 Piano

6. Score any standard tune of your choice as follows:

Five-part Sax Soli (open position)
 Bass
 Drums
 Guitar
 Piano

LESSON NO. 24

A. FIVE SAXES (cont.)

Although the subject of soli voicings for a five sax section has been covered quite thoroughly in preceding lessons, there are some other techniques that may often be effectively used.

1. Free Lead

In this voicing, the lead alto moves freely while the other four voices (A, T, T, B) provide a sustained or semi-sustained background. Free lead is often intermingled with conventional five part soli voicing.

Ex. 1

Gaug7. C F7 C Bbm7 Eb7 Ab Db7 C

2. "Pastels" voicing

The name for this voicing is taken from the Stan Kenton arrangement of "Opus in Pastels" which utilizes this style of sax section writing. The two altos play a duet style soli (preferably in thirds) while the three lower voices (T, T, B) provide a strong sustained background. Most effective voicings for the three lower saxes are illustrated in the following chart:

Ex. 2

Tenor	3	3	7
Tenor	5	7	3
Bari.	1	1	5

Use high degrees freely in writing the alto duet and, again, remember that this style of writing may be effectively intermingled with conventional sax soli voicing. Following is an example of "pastels" voicing for a five part sax section:

Ex. 3

Ex. 3 is a musical score for a five-part sax section. The key signature is three flats (Bb, Eb, Ab). The score is divided into five measures, each with a chord label above it: Eb, Gb7, Fm7, E7, and Eb. The notation shows a complex voicing with many notes, including some accidentals, and a bass line with a few notes.

3. Free Baritone

This consists of a four part sax soli (A, A, T, T) in closed, 2nd dropped, 3rd dropped or variable open position with an independent baritone sax part. Since it will, for the most part, constitute a sustained line, the bari part should use root or fifth when it attacks with the rest of the section. Where the upper four voices sustain, the baritone part may fill in with connecting melodic motion.

Ex. 4

Ex. 4 is a musical score for a four-part sax soli and a baritone sax part. The key signature is one flat (Bb). The score is divided into seven measures, each with a chord label above it: Dm7, G7 (b9, b13), CMaj7, A7, Dm7, G7, and C. The notation shows a complex voicing with many notes, including some accidentals, and a bass line with a few notes.

All of the sax voicings discussed in previous lessons may be intermingled with the three special cases described in Lesson #24 in composing a sax soli.

Ex. 5

Chord progression for Ex. 5:

Caug7 Fm7 Bb7 Eb C7(b9) Fm7 Bb7 Cm7^(b5) Caug7

Fm7 Abm Eb Caug7 Fm7 Bb7(b9) EbMaj7

The first system of Ex. 5 consists of two staves. The top staff has a treble clef and a key signature of two flats (Bb, Eb). It contains a series of chords and notes: Caug7, Fm7, Bb7, Eb, C7(b9), Fm7, Bb7, Cm7^(b5), and Caug7. The bottom staff has a bass clef and contains notes corresponding to the chords above. The second system also has two staves with the same key signature. The top staff contains chords: Fm7, Abm, Eb, Caug7, Fm7, Bb7(b9), and EbMaj7. The bottom staff contains notes corresponding to these chords.

B. SIX BRASS (3 trumpets - 3 trombones)

1. Lead and 2nd voice doubled

Ex. 6

Chord progression for Ex. 6:

F F#⁰ Gm7 Caug7 Am7 Abm7 Gm7 C7(b9)

Ex. 6 shows a musical example for six brass instruments (3 trumpets, 3 trombones). It consists of two staves. The top staff has a treble clef and a key signature of two flats (Bb, Eb). It contains a series of chords and notes: F, F#⁰, Gm7, Caug7, Am7, Abm7, Gm7, and C7(b9). The bottom staff has a bass clef and contains notes corresponding to the chords above.

2. Lead and 3rd voice doubled

Ex. 7

Chord progression for Ex. 7:

F F#⁰ Gm7 Caug7 Am7 Abm7 Gm7 C7(b9)

Ex. 7 shows a musical example for six brass instruments (3 trumpets, 3 trombones). It consists of two staves. The top staff has a treble clef and a key signature of two flats (Bb, Eb). It contains a series of chords and notes: F, F#⁰, Gm7, Caug7, Am7, Abm7, Gm7, and C7(b9). The bottom staff has a bass clef and contains notes corresponding to the chords above.

* low for hi in place of doubled lead

*

3. Lead and 3rd voice doubled - 2nd voice dropped 8vb

Ex. 8

Chord progression for Ex. 8: F, F#°, Gm7, Caug7, Am7, Abm7, Gm7, C7(b9).

4. Lead and 4th voice doubled - 2nd voice dropped 8vb

Ex. 9

Chord progression for Ex. 9: Ab, A°, Bbm7, Ebaug7, Cm7, Em7, Bbm7, Eb7(b9).

5. Lead and 2nd voice doubled - 3rd voice dropped 8vb

Ex. 10

Chord progression for Ex. 10: Ab, A°, Bbm7, Ebaug7, Cm7, Bm7, Bbm7, Eb7.

* substitute low for hi in place of doubled lead

It is possible to intermingle any of these six brass voicings to assure strong voicing on open sustained chords or to avoid violating low interval limits as outlined in Lesson #23.

C. SEVEN BRASS (4 trumpets - 3 trombones)

1. Lead, 2nd voice and 3rd voice doubled

Ex. 11

F F#° Gm7 Caug7 Am7 Abm7 Gm7 C7(b9)

* substitute low for hi to avoid b9 on bottom *

2. Trombones - basic chord sound (135 - 136 - 137 - 357)

Trumpets - four part block (closed, 2nd dropped or 3rd dropped)

Ex. 12

Ab A° Bbm7 Ebaug7 Cm7 Bm7 Bbm7 Eb7(b9)

3. Trombones - basic chord sound

Trumpets - separate four part upper structure (usually triads) with 4th trumpet doubling lead one octave lower.

Ex. 13

Ab A° Bbm7 Ebaug7 Cm7 Bm7 Bbm7 Eb7(b9)

D. CONCERTED VOICINGS (Brass plus Saxes)

The expression "soli" is used to indicate a passage scored for one section; the term "tutti" to indicate a passage played by the entire ensemble. (In the case of the dance-band, brass plus saxes)

There are virtually unlimited possibilities for combining the two sections and it would be impossible to catalogue them all. Following is a listing of those "tutti" voicings that are most commonly used and have generally proven to be effective. Range, low-interval limits and general quality of sound desired should all be determining factors in deciding which to use,

Note: To simplify analysis of the following examples, four brass and four saxes have been used.

1. Saxes built down from 2nd voice of brass

Ex. 14

The musical score for Ex. 14 is written for four brass and four saxophone parts. The top staff is labeled 'Brass' and the bottom staff is labeled 'Saxes'. The score is divided into four measures, each with a specific voicing: Bb7(b9) Eb, Gb°, Fm7, and Bb7. The saxophone parts are built down from the second voice of the brass parts. A lead alto is indicated by an asterisk (*) in the first measure, and a note indicates that the lead alto doubles the 2nd trumpet throughout.

* lead alto doubles 2nd trumpet throughout

2. Saxes built down from 3rd voice of brass

Ex. 15

Brass

Saxes

Bb7(b9) Eb Gb° Fm7

* lead alto doubles 3rd trumpet throughout

3. Saxes built down from 4th voice of brass

Ex. 16

Brass

Saxes

Bb7(b9) Eb Gb° Fm7

* lead alto doubles 1st trombone throughout

4. Non-constant lead line composed for lead alto before harmonizing rest of sax section.

Ex. 17

The musical score for Ex. 17 is divided into two systems: Brass and Saxes. The Brass system features a lead line for the lead alto, which is non-constant, and a harmonized rest of the sax section. The Saxes system features a lead line for the lead alto, which is non-constant, and a harmonized rest of the brass section. The score includes various chords and a non-constant lead line for the lead alto.

Chords indicated above the staff:

- Bb7(b9) Eb
- Gb°
- Fm7
- Bb7

It is important that you understand that these examples illustrate only a very few of the many, many possibilities for concerted voicing. For purposes of illustration variable open voicing has been used freely but it is, of course, possible to use constant closed, 2nd voice dropped, etc., etc. Mechanical couplings and mechanical open voicings are effective and will usually result in a good ensemble sound in upper, middle and medium-low registers.

E. CONCERTED VOICINGS (cont.)

To complete our discussion of ensemble voicings, it is also possible to have a brass soli with a harmonized sax background; or a sax soli with a harmonized brass background. All principles of background writing as covered earlier in the course still apply simply harmonize both sections.

Ex. 18 (a)

Bb7(b9) Eb Cb° Fm7 Bb7

ass

saxes

This musical score for Ex. 18 (a) is written for saxophone and bass. The key signature has two flats (Bb and Eb). The saxophone part (top staff) features a complex melodic line with many beamed sixteenth and thirty-second notes. The bass part (bottom staff) provides harmonic support with chords and some melodic movement. Above the staves, the following chords are indicated: Bb7(b9), Eb, Cb°, Fm7, and Bb7. The saxophone part is labeled 'saxes' and the bass part is labeled 'ass'.

G7(b9) C Eb° Dm7 G7

ass

saxes

This section continues the musical score for Ex. 18 (a). It maintains the same instrumentation and key signature. The saxophone part continues its intricate melodic pattern. The bass part shows more active harmonic movement. Above the staves, the following chords are indicated: G7(b9), C, Eb°, Dm7, and G7. The saxophone part is labeled 'saxes' and the bass part is labeled 'ass'.

ASSIGNMENT

1. a. Score melody (a) for five saxes using "free lead".
- b. Score melody (b) for five saxes using "pastels voicing".
- c. Score melody (c) for five saxes using "free bari".

(a) F Am7 D7(b9) Gm7 C7 F Em7(b5) A7

Dm Dm(Maj7) Dm7 G7 Gm7 C7

(b) Db Gb7 Db D7(#11)

Db Ebm7 Ab7 Db D7

(c) C7(b9) Fm7 Bb7(b9) Eb C7

Fm7 Bb7 Eb Caug7 Fm7

2. Score any standard tune of your choice for five saxes intermingling the three styles described in this lesson with conventional sax voicing.

- G7(b9) C Gm7 G7 F
-
- Em7 Bb7 Eb Ab7 Dm7 G7 C
-

- Gm7 C7 F Ab° Gm7 C7 Am7(b5) D7(b9)
 Gm7 C7 F D7(b9) Gm7

- 1st 8 bars brass soli
- 2nd 8 bars brass soli
sax background
- 3rd 8 bars brass background
sax soli
- 4th 8 bars concerted ensemble

PLANNING AND CONSTRUCTING AN ARRANGEMENT

A. PLANNING

The primary objective in planning an arrangement is to produce a musical work that has logical and sensible continuity from beginning to end. You must keep in mind that the listener will hear the arrangement as a unified whole and not as a series of isolated sections.

After selecting the tune to be arranged and the instrumentation (or after these are selected for you by the requirements of a specific arranging assignment), do not start the actual scoring until you have done the following:

1. Determine the overall length of the arrangement. (One and one-half choruses; two choruses; etc.)
2. Decide which soloists or sections are to be featured.
3. Consider the style of the band for which you are writing and the adaptability of the tune to this style.
4. Work out a set of chord changes that you feel are basically correct and suitable. (although these changes may be re-harmonized during the course of the arrangement)
5. Familiarize yourself thoroughly with the tune and the chord changes and, if possible, simply think about the arrangement for a while.

Once you have sat down with score pad and pencil (and eraser), the entire arrangement should be sketched from beginning to end. Sketching simply consists of filling in section lead lines without bothering to complete the harmonization. By doing this at one sitting, you will be able to picture the arrangement as a complete unit with all phrases visualized at the same tempo and with the same feeling. Disregarding this procedure may often result in a series of excellent eight-bar phrases that never seem to sound quite right when played in succession.

NOTE: The exception to this is the composing of the introduction. If it is not a thematic introduction, it is often advisable to wait until the rest of the arrangement is scored so that some rhythmic, melodic or harmonic idea that is related to the arrangement itself can be utilized.

B. FORM

"Form" meaning logical overall construction and sensible relationship between adjacent sections is what we are concerned with rather than "form" meaning the adherence to formal restrictions and planning. Again, if the arrangement is conceived as a whole and, assuming that personal musical taste based on experience and association is adequate, good "form" should automatically result.

C. PLANNING TIME DURATION

"Clock-time duration is an important factor in planning any arrangement. The average dance-band arrangement ranges between 2 minutes; 30 seconds and 3 minutes; 30 seconds if the arrangement is to be recorded, plan on 2 minutes; 15 seconds to 3 minutes. These time durations apply primarily to commercial arrangements. Production numbers and jazz arrangements may normally be of any desired length.

The following formula may be used in determining exact clock-time duration.

$$\frac{\text{M. M.}}{60} = \frac{\text{Number of beats}}{\text{Clock-time (in sec.)}}$$

Simply translated, this formula becomes:

$$\frac{\text{Number of beats in a minute (M. M.)}}{\text{Number of seconds in a minute (60)}} = \frac{\text{Number of beats in arrangement}}{\text{Number of seconds in arrangement}}$$

Example:

M. M. (metronome marking) = 92

Number of beats (4 bar intro, 1 and 1/2 choruses; 4/4 time) = 208

Clock-time = x

The formula will now appear as:

$$\frac{92}{60} = \frac{208}{x}$$

To solve for "x", simply cross-multiply as follows:

$$\begin{aligned} 92 x &= 60 \times 208 \\ 92 x &= 12480 \\ x &= 12480 \text{ divided by } 92 \\ x &= 135 \text{ seconds (2 minutes; 15 seconds)} \end{aligned}$$

Example:

M.M. (metronome marking) = 112
Number of beats (4 bar intro, 2 choruses, 8 bar tag; 4/4 time) = 304
Clock-time = x

$$\frac{112}{60} = \frac{304}{x}$$

Again, cross-multiply to find "x"

$$\begin{aligned} 112 x &= 60 \times 304 \\ 112 x &= 18240 \\ x &= 18240 \text{ divided by } 112 \\ x &= 163 \text{ seconds (2 minutes; 43 seconds)} \end{aligned}$$

This same formula may be used (a) when the clock-time is predetermined and the length of the arrangement is to be computed, or (b) when the clock-time and the length are predetermined and the metronome marking is to be computed.

Example:

(a) Clock-time = 204 seconds
M.M. = 80
Number of beats = x

$$\frac{80}{60} = \frac{x}{204}$$

(b) Clock-time = 204 seconds
Number of beats = 272
M. M. = x

$$\frac{x}{60} = \frac{272}{204}$$

D. SCORING

Throughout the last few lessons of the course, we have used just two staves for the brass section and two staves for the sax section. It is now advisable to start using the method of scoring employed by most professional arrangers. Example 1 (a) and Example 1 (b) are exactly the same, the only change being that each instrument is notated on a separate staff in the latter illustration.

NOTE: Many arrangers prefer to write "transposed" scores, i.e., with each instrument already transposed rather than in the concert key.

Ex. 1 (a)

The musical score for Example 1 (a) is divided into two main sections: Brass and Sax. The Brass section consists of two staves, and the Sax section also consists of two staves. The score is written in 4/4 time. The key signature is one flat (Bb). The chords indicated above the staves are: E7, Eb, Fm7, E7(#9), Eb, Ab, Gm7, Gbm7, Fm7, and E7(#9). The notation includes various musical symbols such as notes, rests, and accidentals. The Sax section features a melodic line with eighth and sixteenth notes, while the Brass section provides harmonic support with chords and some melodic fragments. The score is presented in a standard musical notation format with a key signature of one flat and a 4/4 time signature.

(b)

ds

pls.

ns.

itar

ss

ns

10

Handwritten musical notation on ten staves. The notation includes various musical symbols such as notes, rests, and dynamic markings. The staves are labeled on the left with instrument abbreviations: ds, pls., ns., itar, ss, ns, and 10. The music is written in a key with two flats and common time. Dynamic markings include f, mp, mf, and p. There are also some handwritten notes and corrections.

E. GENERAL SUGGESTIONS

1. Try to establish some identifying characteristic in each arrangement. This may take the form of a melodic or rhythmic motif, or a particular orchestral timbre which recurs during the arrangement.
2. Always be aware of the limitations as well as the capabilities of the instrumentalists who will be performing your arrangement. Take advantage of the strengths and avoid writing passages that are beyond the technique of the individual players.
3. Experiment freely with different tone colors and combinations of instruments (trombone lead over saxes; clarinets, tenors and cup-muted brass; two trombones, two tenors, bari., etc., etc.,)
4. If possible, have everything you write played by the proper instrumentation. This is the only way in which you will be able to relate your ideas to the resulting orchestral sound.
5. Take advantage of re-harmonization techniques to provide harmonic interest. It is not necessary to use the same chords each time a melodic phrase is repeated.
6. Do not expect to write fluently and professionally until you have written and heard at least twenty to forty arrangements.
7. Study and analyze the scores of other arrangers. Strongly recommended is the "Jazz in the Classroom" LP and score series issued by the Berklee School of Music.

ASSIGNMENT:

1. Write a complete arrangement of the following tune (or any other standard tune of your choice) for seven brass, five saxes and rhythm.
2. Submit to your instructor any specific questions you may have regarding the techniques covered in this course.

melody for Problem No. 1

Chords: D7(b9) Gm7 C7(b9) F Dm7 Gm7 C7(b9) Am7 D7(b9) Gm7 Ab° F⁶₃ Ab° Gm7 C7(b9) Am7 D7(b9) 2. Gm7 C7(b9) F Bbm7 Eb7 DMaj7 Dm7 G7 Gm7 C7 Am7(b5) D7(b9) Gm7 C7(b9) F Dm7 Gm7 C7(b9) Am7 D7(b9) Gm7 Ab° F⁶₃ Ab° Gm7 C7(b9) Am7 D7(b9) Gm7 Ab° F⁶₃ Ab° Gm7 C7(b9) F

CODA:

The program of study which you have just completed is as all-inclusive and as comprehensive as the length and scope of this course allows. The assignments have been designed to provide you with a practical working knowledge of each technique and the ability to apply these techniques in your playing and arranging.

Your progress from this point on will depend largely on the amount of time you devote to playing, composing, arranging and listening. It is certainly possible, however, that a good instructor will be able to add to your basic fund of knowledge and make you aware of certain elements of musical taste which may not be a part of your present thinking.

There are also many other aspects of musical study such as composition, cue writing, ear training, instrumental coaching, etc., which will contribute greatly to your general musical knowledge, and you should think of this as one of the intermediate steps rather than as the ending point of your musical education.

Just as soon as your final assignment is submitted and corrected, you will receive a certificate from the Berklee School of Music attesting to the fact that you have successfully completed this program of correspondence study.

Should you have any comments regarding the correspondence course, we would sincerely appreciate hearing of your reaction.

We have enjoyed having the opportunity to work with you and wish you every success in your musical activities.

BERKLEE SCHOOL OF MUSIC